

# WEST CHESTER UNIVERSITY



## Graduate Catalog

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### 1991-92



West Chester University





West Chester University  
**Graduate Catalog**  
**1991-1992**

## Communications Directory

MAILING ADDRESS:	West Chester University West Chester, PA 19383
TELEPHONES:	Dial 436 plus number in parentheses. For offices not shown here, call the University Information Center: (215) 436-1000.
Academic Advising	Director of Academic Advising, Lawrence Center (3505)
Academic Development Program	Director of Academic Development Program, Lawrence Center (3505)
Admissions/Undergraduate Catalogs	Director of Admissions, 100 West Rosedale (3411)
Affirmative Action	Director of Affirmative Action, Lawrence Center (2838)
Billing/Payments	Office of the Bursar, Elsie O. Bull Center (2552)
Book Store	Student Services Inc., Sykes Union Building (2242)
Careers/Placement	Director of Career Development Center, Lawrence Center (2501)
Continuing Education	Dean, University College, Elsie O. Bull Center (3550) Coordinator of the Evening Division, Elsie O. Bull Center (3550)
Counseling	Counseling Center, Lawrence Center (2301)
Financial Aid/Work Study	Director of Financial Aid, Elsie O. Bull Center (2627)
Graduate Studies/Catalogs	Dean of Graduate Studies and Sponsored Research, Old Library (2943)
Housing	Student Development Office, Sykes Union Building (3307)
Police	Public Safety Department, Peoples Maintenance Building (3311)
Public Relations	Director of University Relations, Philips Memorial (3383)
Scheduling Registration	University Registrar, Elsie O. Bull Center (3541)
Student Services Inc. Summer Sessions	Sykes Union Building (2955) Director of Summer Sessions, Elsie O. Bull Center (2230)
Teacher Certification	Teacher Certification Office, Recitation Hall (2426)
University Events Student Activities	Student Programming Dept./Student Activities Council (2983) or Sykes Information Desk (2984)

## Nondiscrimination/Affirmative Action Policy

West Chester University is committed to providing leadership in extending equal opportunities to all individuals. Accordingly, the University will continue to make every effort to provide these rights to all persons regardless of race, color, religious creed, lifestyle, handicap, ancestry, national origin, union membership, age or sex. This policy applies to all members of the University community including students, faculty, staff, and administrators. It also applies to all applicants for admission or employment and all participants in University-sponsored activities.

This policy is in compliance with federal and state laws, including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendment of 1972, Section 504 of the Rehabilitation Act of 1973 and Executive Order of the Governor of Pennsylvania.

Any individual having suggestions, problems, complaints, or grievances with regard to equal opportunity or affirmative action is encouraged to contact the director of affirmative action, 104 Lawrence Center (215) 436-2433.

## Sexual Harassment Policy

West Chester University is committed to equality of opportunity and freedom from discrimination for all its students and employees. Based on this commitment and the recognition that sexual harassment is a form of discrimination, which is of a growing concern to the higher education community, the University provides the following policy:

Harassment on the basis of sex is a violation of Title VII of the U.S. Civil Rights Act, Title IX of the Educational Amendments of 1972, and of the Pennsylvania Human Relations Act. Because West Chester University is committed to establishing an environment free from discrimination and harassment, sexual harassment will not be tolerated in any form. Upon official filing of a complaint, immediate investigation will be made culminating in appropriate corrective action where warranted, which may include termination of the relationship with the University.

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature occurring when:

1. submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, or of a student's academic status or treatment;
2. submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting such an individual; or
3. such conduct creates an intimidating, hostile, or offensive living, working, or academic environment to a reasonable person.

A complete copy of the University's Sexual Harassment Policy document, inclusive of the investigatory procedures, may be obtained from the Affirmative Action Office.

Individuals who believe themselves to be the victims of sexual harassment, or who have questions about the University's policy on this matter should contact the director of affirmative action, 104 Lawrence Center (215) 436-2433.

## Accreditation

West Chester University is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The National Athletic Training Association, The National Association of Schools of Music, The National League for Nursing, The American Chemical Society, The Commission on Accreditation in Clinical Chemistry, The Joint Review Committee for Respiratory Therapy Education, and the Council on Social Work Education (baccalaureate level). West Chester University has been given program approval by the Department of Education of the Commonwealth of Pennsylvania for the certification of teachers.

**The provisions of this catalog are not to be regarded as an irrevocable contract between the student and the University. West Chester University reserves the right to change any provisions or requirements at any time.**

## Office of Graduate Studies and Sponsored Research

Old Library Building  
Church Street and Rosedale Avenue  
West Chester University  
West Chester, PA 19383  
(215) 436-2943

Hours:

Monday—Friday  
Tuesday and Wednesday

8:00 a.m.—4:30 p.m.  
4:30—7:00 p.m.



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# Graduate Programs of Study

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## Administration

M.S.A. (Concentrations: Health Services, Individualized, Leadership for Women, Long-Term Care, Psychology/Personnel, Public Administration, Social Work, Sport and Athletic Administration, Training and Development, Urban/Regional Planning)  
Cooperative degree with Clinical Chemistry

## Biology

M.A. Biology

## Business

M.B.A. (Concentrations: Accounting, Economics/Finance, General Business, Management, Management Information Systems, Small Business Management)

## Chemistry

M.A. Physical Science (Concentration: Chemistry)  
M.Ed. Chemistry  
M.S. Chemistry  
M.S. Clinical Chemistry

## Childhood Studies and Reading

M.Ed. Elementary Education (Concentrations: Bilingual Education, Children's Literature, Creative Teaching-Learning, Early Childhood Education, Elementary Education, Human Development, Language Arts, Mathematics, Reading, Science, Social Studies, Special Education)  
Certification in Elementary Education  
M.Ed. Reading  
Reading Specialist Certification  
Certificate of Advanced Graduate Study in Childhood Studies and Reading

## Communicative Disorders

M.A. Speech Pathology

## Counselor, Secondary, and Professional Education

M.Ed. Elementary Education Counseling  
M.Ed. Secondary Education Counseling  
M.S. Higher Education Counseling  
M.S. Educational Research  
Specialist I Certificate in Counseling (Elementary or Secondary)  
M.Ed. Secondary Education  
Courses in Environmental Education, Urban Education

## Criminal Justice

M.S. Criminal Justice

## English

M.A. English

## Foreign Languages

M.A. French  
M.A. Spanish  
M.Ed. French  
M.Ed. German  
M.Ed. Latin  
M.Ed. Spanish

## Geography and Planning

M.A. Geography  
M.S.A. (Concentrations: Leadership for Women, Public Administration, Urban/Regional Planning)

## Geology and Astronomy

M.A. Physical Science (Concentration: Earth Sciences)

## Health

M.Ed. Gerontology  
M.Ed. Public Health  
M.Ed. School Health  
M.S. Environmental Health  
M.S. Gerontology  
M.S. Public Health  
M.S. School Health  
M.S. Administration (Concentrations: Health Services, Long-Term Care)  
Certificate program in Gerontology

## History

M.A. History  
M.Ed. History

## Instructional Media

M.Ed. Instructional Media Education  
M.S. Instructional Media  
Teaching Certification for Instructional Media Education

## Leadership for Women

M.S.A. (Concentration: Leadership for Women)

## Mathematics and Computer Science

M.A. Mathematics (Concentrations: Pure Mathematics, Mathematics Education, Applied Computer Science)  
M.Ed. Mathematics  
M.S. Computer Science

## Music

M.A. Music History  
M.M. Accompanying  
M.M. Keyboard Performance  
M.M. Piano Pedagogy  
M.M. Instrumental Performance  
M.M. Music Education  
M.M. Music Theory/Composition  
M.M. Vocal/Choral Performance

## Philosophy

M.A. Philosophy

## Physical Education

M.S. Physical Education  
M.S.A. (Concentration: Sport and Athletic Administration)

## Physical Science (Interdepartmental)

M.A. Physical Science (Concentrations: Chemistry, Earth Sciences)

## Political Science

M.S.A. (Concentration: Public Administration)

## Psychology

M.A. Clinical Psychology  
M.A. General Psychology  
M.A. Industrial Organizational Psychology  
M.A. Group Psychotherapy/Processes (Concentration: Psychodrama)  
M.A. Social Science (Concentration: Psychology)  
M.S.A. (Concentrations: Psychology/Personnel, Training and Development)

## Public Administration

See Political Science

## Social Work

M.S.A. (Concentration: Social Work)

## Special Education

M.Ed. Special Education  
Certification in Special Education

## Teaching English as a Second Language

M.A. Teaching English as a Second Language

**The following departments and interdisciplinary areas offer graduate courses, but no graduate degree.**

Art, Linguistics, Speech Communication and Theatre, Women's Studies

# Graduate Studies at West Chester

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West Chester University Graduate Studies are committed to broadening scholarship, strengthening professional skills, and encouraging significant research.

THE GRADUATE STUDIES PROGRAM at West Chester has grown remarkably since its introduction in 1959. About 2,000 students now attend during the fall and spring semesters; some 1,800 enroll for summer sessions. West Chester University's graduate program is the largest within the 14 Commonwealth-owned institutions of higher learning.

The University began as the West Chester Academy in 1812 and functioned as a normal school from 1871-1927. Since it became a four-year college in 1927, West Chester has developed steadily and is now one of the major comprehensive institutions of higher learning in the Philadelphia vicinity.

Facilities for graduate education are good. The Commonwealth inaugurated an extensive building program in the 1950s which led to the Schmucker Science Center, a block-long complex of buildings including a planetarium, an astronomical observatory, and modern laboratories; the

Elsie O. Bull Learning and Research Center; and the Francis Harvey Green Library, one of Pennsylvania's principal university libraries.

The University offers the Master of Arts, the Master of Business Administration, the Master of Education, the Master of Music, and the Master of Science in approximately 70 disciplines or areas of study.

Master's degree programs such as the M.B.A., the M.A. in speech pathology, the M.S.A., the M.S. in computer science, and the certificate of advanced graduate study in reading have been designed to meet the particular needs of the times and the area.

In addition to its degree and certification programs, West Chester offers nondegree study in a number of areas including art, economics, linguistics, speech communication, theatre arts, and urban education.

For the benefit of in-service teachers and other employed persons, West Chester schedules most of its graduate classes during late afternoons and evenings.

## Graduate Summer Sessions

The 12-week summer sessions are divided into three periods: the Pre Session of three weeks, the Regular Session of six weeks, and the Post Session of three weeks. Most Pre Session classes meet in the evenings; almost all classes for the other two sessions meet during the daytime. (To apply, see Admission.) Admission to summer sessions courses does not constitute admission to a degree program.

## The Campus

The University is located in West Chester, a community in southeastern Pennsylvania strategically located at the center of the mid-Atlantic corridor. The seat of Chester County government for almost two centuries, West Chester retains much of its historical charm in its buildings and countryside, but offers the twentieth-century advantages of a town in the heart of an expanding economic area.

The University occupies 388 acres. The main campus is situated on 97 acres within the Borough of West Chester; the south campus is located on a 291-acre tract in adjacent townships. West Chester was settled in the

early eighteenth century principally by members of the Society of Friends. With a population of about 20,000, the borough is small enough to have the pleasant aspects of a tree-shaded American town, large enough to provide essential services and the substance of a vigorous community, and old enough to give the student first-hand contact with America's early history. The heart of West Chester is its courthouse, a Classical Revival building designed in the 1840s by Thomas U. Walter, one of the architects for the Capitol in Washington, D.C.

Today, West Chester is part of the rapidly growing suburban complex surrounding Philadelphia and offers interesting opportunities for the study of local, county, and regional government in a period of change and growth.

Philadelphia is 25 miles to the east and Wilmington 17 miles to the south of the campus. The libraries, museums, and other cultural and historical resources of both cities are within easy reach. Valley Forge, the Brandywine Battlefield, Longwood Gardens, and other historical attractions are near West Chester.

## How to Reach West Chester

The Borough of West Chester is easily accessible from all directions both by car and public transportation. Route 3, the West Chester Pike, leads directly into town from center-city Philadelphia. From the Pennsylvania Turnpike, motorists traveling west should take Route 202 south from the Valley Forge Interchange, while those traveling east can arrive via Route 100 south from the Downingtown Interchange. From the south, Route 202 from Wilmington and Routes 100 and 52 from U.S. Route 1 all lead to West Chester.

## Undergraduate Studies

Over 10,000 students are enrolled in the University's undergraduate program. The University grants the Associate of Arts in 30 areas, the Associate of Science in two fields, the Bachelor of Science in Education in four basic curricula — elementary education, secondary education, music education, and speech pathology and audiology; the Bachelor of Arts in arts and letters, social and behavioral science, the natural sciences, mathematics, and music; the Bachelor of Science in the sciences and health sciences; the

Bachelor of Music in theory/composition, performance, and music history; and the Bachelor of Science in Nursing.

The University also offers degree programs that prepare students for specialized work in business administration, computer and information sciences, criminal justice, nursing,

social welfare, speech pathology and audiology, and many other fields. The Admissions Office will supply undergraduate admissions materials upon request.

# Admission

## Student Responsibility

It is the responsibility of students to know and observe all policies and procedures for their programs. The University will not waive a regulation because a student pleads ignorance of it. A student planning to graduate should give careful attention to the dates relating to application for graduation as well as other pertinent deadlines announced by the department or the Office of Graduate Studies and Sponsored Research.

## The Application Procedure

Students with a bachelor's degree from an accredited college or university in the United States or with equivalent preparation acquired in another country are eligible to apply for admission as **degree** or **nondegree** students.

1. Applications are available from the Office of Graduate Studies and Sponsored Research and, when completed, should be returned there.
2. Applicants applying as degree students must request all institutions at which they have taken any post-secondary work to submit an official transcript directly to the Office of Graduate Studies and Sponsored Research. Applicants applying for nondegree programs need to supply these only from institutions awarding the degree. West Chester University undergraduate transcripts are available to the Office of Graduate Studies and Sponsored Research; applicants do not need to forward them.
3. Applicants are highly encouraged to consult with the graduate coordinator of the primary interest area.
4. Applicants who have unusual problems or questions are advised to request an interview with the

dean of graduate studies and sponsored research.

## Application Deadline

Degree candidates should apply for admission at least two months before registration for the semester or summer session in which they wish to enroll. Individual programs frequently specify deadlines in advance of those required in the Graduate Studies Office.

## Notification of Admission

All applications are reviewed by both the appropriate department or program and the dean of graduate studies.

The dean will notify applicants of the acceptance or rejection of their applications. Students should meet immediately with their advisors to outline a program of study.

## Registration

Previously enrolled students (those who have attended within the past year) and new applicants will receive scheduling materials and registration instructions by mail. Materials for fall semester are usually available in early April, for spring semester in early November, and for summer sessions in early March. Students who anticipate receiving materials but do not receive them should contact the Graduate Office. Please note that certain high-demand programs have established their own registration procedures specific to their needs.

## Active Status

A student's application and curriculum record will remain active for a two-year period. If two years lapse in which the student fails to register, the record will be placed on inactive status. The student must then reapply to the Office of Graduate Studies.

## Admission Requirements for Degree Students

1. A baccalaureate degree from a college or university accredited in the United States or its equivalent from a school in another country.
  2. A cumulative average of at least 2.50 and a grade of at least 2.75 in the major discipline. (An "A" equals 4.0.)
  3. Scores from the Graduate Management Admission Test, Graduate Record Examination, or the Miller Analogies Test if these are required for admission to the program in which the student wishes to enroll.
  4. Approval by the department offering the desired degree program. Before such approval is given, an interview with a faculty member may be required. The applicant must also meet any other additional requirements established for the degree program, including grade point averages which exceed the minimum graduate admission requirements.
  5. Approval by the dean of graduate studies and sponsored research.
  6. Space available in the program.
- An applicant who has academic deficiencies may be granted provisional status. The departmental graduate coordinator will specify course work which must be taken to remove such deficiencies and which will not be credited to degree requirements including, if necessary, undergraduate prerequisites.

Admission to degree study does not constitute admission to degree candidacy. After a student has satisfactorily fulfilled certain course requirements specified in the degree program and has completed 12 to 15 semester hours of work, the student applies for admission to degree candidacy.

## Admission Requirements for Nondegree Students

1. A baccalaureate degree from a college or university accredited in the United States or its equivalent from a school in another country.
2. A cumulative average of 2.0 (An "A" equals 4.0.)
3. A properly completed application form.
4. An interview with a faculty member if special questions arise during the evaluation of the application.

Admission is dependent upon the availability of space in the desired department or program of study.

Those admitted as nondegree students may include applicants who fail to qualify as degree students. There is no assurance that courses taken under nondegree status may be used later to satisfy degree requirements.

## Undergraduates

An undergraduate who is in the final semester of work for the bachelor's degree and has an overall grade point average of at least 3.0 may, with the permission of the dean of graduate studies and sponsored research, enroll in up to six credits of graduate-level courses. Credits earned may be applied to a master's degree program.

## Auditors

An auditor is a student who attends classes but does not necessarily do other work required of students in the course. The auditor need not meet normal admission requirements but must obtain approval to audit from the department chairperson or program coordinator and the course professor. Auditors pay the regular basic fee and must file the usual formal application for admission to the University. The student cannot receive credit for courses taken as an auditor.

## Transfer of Credit

Applicants to a degree program at

West Chester who have earned credits through previous graduate study at another college or university may transfer credit under certain circumstances.

1. The credits must have been earned at an approved graduate school.
2. The courses taken must be approved by the department in which the applicant intends to enroll at West Chester and the graduate dean.
3. Normally, no more than six credits may be transferred.
4. The grade earned for courses to be transferred must be B or better. (An "A" equals 4.0.)
5. An official transcript must be submitted. Transcripts must be sent directly to the Office of Graduate Studies and Sponsored Research by the institution that granted the credits, and they must clearly indicate that the courses to be transferred are graduate courses, which were given graduate credit.
6. The courses for transfer must have been taken recently enough to fall within the six-year time limitation.
7. Application forms for transfer of credit may be obtained in the Office of Graduate Studies and Sponsored Research.

## Admission of Foreign Students

Students from foreign countries may be admitted to the graduate program provided they meet certain special requirements. Foreign students, like other out-of-state students, are accepted only when space is available.

All applications and supporting documents must be on file in the Office of Graduate Studies and Sponsored Research no less than four months before the student proposes to enter the country.

Applicants whose native language is not English must submit evidence of satisfactory performance on the Test

of English as a Foreign Language (TOEFL) to the Office of Graduate Studies and Sponsored Research before application forms can be processed. Normally a score of 550 is considered acceptable, but 600 is preferable. Information about the TOEFL test, including test dates and locations in foreign countries, can be obtained from the Educational Testing Service, Box 899, Princeton, N.J. 08540, U.S.A. Registration forms must reach Princeton at least five weeks before the test is to be taken.

The following information and documents must be filed with the Office of Graduate Studies and Sponsored Research:

1. A completed application form.
2. An official copy of school certificates, showing the date issued for all work done beyond the elementary level.
3. A statement from a bank or other financial institution certifying ample financial resources to maintain oneself while a student in the United States. Current costs are \$8600 for the academic year. (Summer and holidays are not figured into these costs.)
4. A Medical History Form and an Immunization Record must be completed by a physician and returned to the Office of Graduate Studies.
5. A U.S. Immigration (I-20) Form will be supplied by the University.

After the application and supporting documents have been reviewed, the Office of Graduate Studies and Sponsored Research will notify the applicant of its action. Foreign students are urged to remain in their own countries until they receive notice of acceptance. The University cannot assume responsibility for their housing or welfare. Once a foreign student has been admitted, University authorities will make every reasonable effort to find suitable housing.

# Good Standing, Academic Probation, Degree Candidacy, and Degree Requirements

## Good Standing

Students must maintain a 2.75 cumulative average (i.e., all graduate courses taken) and a 3.0 in the major discipline (i.e., all courses, both required and elective, departmental and nondepartmental taken to fulfill degree requirements) to remain in good standing.

## Academic Probation

Student whose cumulative average falls below 2.75 and/or 3.0 in the major discipline will be placed on probation. Students must return to good standing during the next nine credits of appropriate graduate work, or they will be dropped from the program. Students may not be granted a second probationary period. Students earning as low as a cumulative 2.0 may be dropped without a probationary period. Summer sessions count the same as regular semesters. Those grades recorded determine the students' academic status, even if they change degree programs. Students dropped from a graduate program due to unsatisfactory work will not be permitted to take courses for credit towards a graduate degree in that department beyond the semester in which they are dropped.

Students holding Graduate Assistantships who fail to maintain good standing may have their assistantships revoked or will not have them renewed. This policy includes courses taken during summer sessions. Departments may also stipulate higher academic standards for maintaining assistantships.

## Requirements for Admission to Degree Candidacy

Application for degree candidacy should be made immediately on completion of the first 12 to 15 semester hours of the pre-candidacy period.

During the precandidacy period the students must:

1. Complete those courses which the department or program specifies as prerequisite to degree candidacy.
2. Perform satisfactorily on examinations which the department or program may require for admission to degree candidacy.
3. Maintain a cumulative average of at least 2.75 and an average of at least 3.0 in the major discipline.
4. Meet specific GPA requirements as stipulated by the individual degree program.

## Procedure for Application to Degree Candidacy

1. Students must file applications for admission to degree candidacy with the dean of graduate studies and sponsored research. Forms are available in the Office of Graduate Studies and Sponsored Research.
2. When the applications have been evaluated by the department concerned, the dean of graduate studies and sponsored research will send letters of acceptance or rejection to the students.
3. Upon notice of acceptance, degree candidates must confer with their advisors to continue with their previously established program of study.

Students must be admitted to degree candidacy prior to registering for comprehensive exams before registering for thesis credits.

## Reapplication for Degree Candidacy

Applicants who fail to qualify as degree candidates may reapply. They must attain an average of 3.0 in course work **specified by their advisors.**

## Summary of Requirements for the Master's Degree

1. Admission to degree candidacy.
2. Completion of all requisite courses

and credits with a cumulative average of 2.75, an average of 3.0 in the major discipline, compliance with specific GPA requirements as stipulated by the individual degree program, and achievement of satisfactory scores on the Graduate Management Admission Test, Graduate Record Examination, or the Miller Analogies Test, if required. (See program requirements.)

3. Satisfactory performance on a final written and/or oral comprehensive examination conducted by the student's advisory committee in the field of specialization. (It is the candidate's responsibility to apply for this examination.)
4. Submission and approval of the thesis or research report in those programs requiring it.
5. Fulfillment of any special examinations, requirements, or competencies that are peculiar to a department.
6. Fulfillment of all financial obligations to the University, including payment of the graduation fee, and of all other obligations including the return of University property.
7. Compliance with all academic requests from the dean of graduate studies and sponsored research, including submission of a form letter of intent to graduate by the specified due date.

## Additional Requirements for the Master of Education Degree

In addition to fulfilling these requirements, candidates for certain Master of Education degrees must give evidence of successful teaching experience approved by the department chairperson. Other experiences in lieu of this requirement must be approved by the dean of graduate studies and sponsored research.

# Fees and Expenses

*Special Note: The fees listed below reflect charges at press time. For up-to-date information on fees at any given time, contact the Office of the Bursar (215) 436-2552.*

*Fees and expenses are subject to change without notice. Fees shown here are in effect for the 1990-91 academic year.*

*Unless otherwise specified, fees may be paid by Visa, MasterCard, check, or money order made payable to West Chester University. The cancelled check, money order record, or charge card billing serves as a receipt.*

## Basic Graduate Fees for Legal Residents of Pennsylvania

Less than 9 credits--\$127.00 per semester hour of credit

9 through 15 credits--\$1139.00 per semester

More than 15 credits--\$1139.00 plus \$127.00 for each semester hour of credit beyond 15

## Basic Graduate Fees for Out-of-State Students

Less than 9 credits--\$160.00 per semester hour of credit

9 through 15 credits--\$1442.00 per semester

More than 15 credits--\$1442.00 plus \$160.00 for each semester hour of credit beyond 15

## Housing Fee

The housing fee entitles the student to occupancy of a standard double room in a residence hall with one roommate. This fee covers all utilities, including on-campus and local telephone service (students must provide the actual telephone). The Student Occupancy Agreement, which must be signed before students check into their rooms, is binding for the full academic year (September-May), even for those students who may receive late room assignments. The cost per student is \$1,079.00 a semester.

## On-Campus Residence Fee

The residence fee for students living in campus residence halls is \$1,760.00 per semester and covers housing (\$1,079.00) and meals (\$681.00) while the University is in session. These fees are subject to an annual adjustment.

## Food Plans

### Plan 1 -- 14 Variable Program

entitles students to any 14 of the 21 meals served Monday through Sunday and includes a flexible fund of \$100. This program is required for resident students and is available to off-campus and commuter students.

**Plan 2 -- Flexible Fund Program** is designed for commuters. Students can place a minimum of \$100 into a flexible fund account, which they can access with their ID card in the Food Court, Take Out, or Convenience Store in Lawrence Dining Hall; the deli in Sykes Union Building; or the Bagel Cart. With this program, there is no need for students to carry cash to purchase meals. The flexible fund can be increased in \$25 increments at any time.

All Flexible Fund Dollars must be used by the end of the spring semester. Balances will not be carried forward to the next academic year.

Students in university housing already have their meal plan cost included in their university billing. Off-campus and commuter students can sign up for a meal plan by applying at the Bursar's Office in Elsie O. Bull Center.

## Late Registration Fee

A late registration fee of \$25.00 is required of students scheduling and paying after the official registration deadline.

## Community Center Fee

Students pay a community center fee based on the number of credits carried, as follows:

1 through 6 credits \$ 2.50 per semester  
7 through 8 credits \$ 5.00 per semester  
9 credits or more \$10.00 per semester

The community center fee is **not refundable**.

## Student Union Expansion Fee

Effective with the fall 1991 semester. This fee will be phased in as follows:

	Full Time	Part Time	Summer
Class of 1992	\$14.00	\$ 5.00	\$ 2.50
Class of 1993	28.00	10.00	5.00
Class of 1994	41.00	15.00	7.50
Class of 1995	55.00	20.00	10.00

## Educational Service Fee

\$50.00 per semester, full-time student  
\$20.00 per semester, part-time student  
\$10.00 per summer session

The amounts collected will be set aside and used exclusively for the following:

Educational Supplies	20%
Library Books/Periodicals	40%
Educational Equipment	40%

This fee is fully refundable to those students who officially withdraw prior to the start of class. This fee is nonrefundable for students withdrawing after the start of class.

## Health Center Fee

All full-time students (nine credits or more) are charged a \$30.00 health center fee per semester. Part-time students pay \$12.00 per semester. Regular summer session students pay \$5.00 and PRE and POST summer sessions pay \$3.00.

## Graduate Student Association Fee

\$6.00 per semester full time  
\$3.00 per semester part time

## Course Audit Fee

Students who audit a course (attend a course without taking credit) pay the same fees as other students.

## Financial Obligations

Students are expected to make full payment of fees by the registration deadline in advance of each semester.



The University sends bills for fees preceding each semester. If payment is not made within the stipulated period, the student risks cancellation of all scheduled courses.

Payments normally fall due each academic year as follows:

Fall semester	Mid-August
Spring semester	Mid-December

Any change in these dates will be shown on fall or spring invoices. Checks should be made payable to West Chester University and mailed to:

Office of the Bursar  
Elsie O. Bull Center  
West Chester University  
West Chester, PA 19383

No student will be enrolled, graduated, or given a transcript of his or her record until all charges due at the particular time are paid.

### Billing Address Changes

If a student's billing address changes during enrollment at the University, the new address must be given to the Office of the Registrar in the Elsie O. Bull Center to avoid delayed delivery of bills.

### Dishonored Check Fee

A fee of \$25.00 is charged to accounts for checks returned for any reason.

### Transcript Fee

The fee for transcripts is \$2.00 per copy. Transcript request forms are available in the Registrar's Office.

### Rentals

Any band or orchestra instrument	\$6.00 per semester
\$1.00 per week in summer sessions	
Organ	\$36.00 per semester
\$2.00 per week in summer sessions	

### Withdrawal Procedure

Students who wish to withdraw from the University after paying their semester or summer session fees must follow the official withdrawal procedure. Withdrawal forms are available in the Registrar's Office, Elsie O. Bull Center. Completed forms must be returned to that office during the

semester or summer session when the withdrawal occurs.

### Basic Fee Refund Policy

Refunds cannot be made unless the student *officially* processes the withdrawal from the University or the drop from a course through the Office of the Registrar. Application fees credited to the student's basic fee are not refundable. Other amounts paid and credited toward the basic tuition fee are refundable in full for students who withdraw for approved reasons (such as documented ill health or personal tragedy) prior to the first day of the semester.

Beginning with the first class day of the semester, the basic tuition fee exclusive of the acceptance fee is refundable for students who withdraw in accordance with the following schedule:

1st or 2nd week	80%
3rd week	70%
4th week	60%
5th week	50%
6th week and thereafter	NO REFUND

Students who officially reduce their credit hour load to qualify for a lower basic tuition fee shall receive a refund of a percentage of the difference in accordance with the above schedule.

### Policies on Refunds

Refunds cannot be made after the close of the semester. Students should initiate refund requests immediately by contacting the Office of the Registrar and the Office of the Bursar in the Elsie O. Bull Center.

Refund of the application fee or acceptance fee will not be made under any circumstances.

Refunds will not be made to students who are temporarily or indefinitely suspended.

The summer graduate catalog states summer session fees and policies.

### Housing Refunds

The \$100.00 room deposit is not refundable. When students change from resident status to commuter status after the beginning of the semester, there is no room refund, except for the most compelling reasons and

when a "Request for Cancellation of Occupancy Agreement" is properly filed in the Office of Housing and Residence Life.

### Meal Refunds

The fee for meals may be refunded on a weekly prorated basis. Contact the Office of the Bursar in the Elsie O. Bull Center.

### Application Fee

A nonrefundable graduate student application fee of \$20 is assessed to all students applying to the graduate program.

### Graduation Fee

A graduation fee of \$30.00 is required of all degree candidates. No degree will be granted until this fee is paid. Checks should be drawn to the Commencement Fund and delivered to the Office of Graduate Studies and Sponsored Research on or before the due date.

### Parking Fee

The University collects a parking fee from students eligible to use on-campus parking facilities. For details, consult the automobile regulations that accompany the fall semester student bills.

### Library Card/ID Card

In order to borrow books from the library, graduate students must present ID (identification) card. An ID card can be purchased for a \$2.00 fee at the SSI Office, Sykes Union Building.

### Academic Computing Center I.D. Card

In order to borrow software and/or use the Academic Computing Center facilities, all graduate students (part-time and full-time students) must present a valid WCU ID card. The ID card is purchased at the SSI Office, Sykes Union Building. (For further information on the cost and hours for pictures, contact SSI at 215-436-2955.)

### Fees for Crossover Registration

Students who are admitted to graduate study and need to take undergraduate course work to correct academic defi-



ciencies will be advised to enroll in undergraduate courses exclusively, and they will be billed undergraduate fees. Students who are enrolled in graduate and undergraduate courses during the same semester will pay graduate fees for all course work. Further, all such courses or combinations are to appear on a single graduate transcript that includes a code or

legend which differentiates between undergraduate and graduate courses. Undergraduate courses appearing on a graduate transcript may or may not be acceptable for a degree program, according to determinations made by the degree-granting department. Undergraduate students who elect to take graduate courses in their final semester in accordance with Univer-

sity policy will be billed at the undergraduate rate, provided their course load falls within normal limits of 18 hours. Credit earned and grades received will be recorded on the undergraduate transcript. Credits so earned may later be applied to a graduate program, subject to approval of the major department.

The purpose of financial aid at West

## Financial Aid

Chester University is to provide financial assistance and counseling to students who can benefit from further education, but who cannot obtain it without such assistance. Financial assistance consists of gift aid in the form of scholarships or grants and self-help aid in the form of employment or loans. The main responsibility for meeting educational expenses rests with students and their families. Financial aid is a supplement to family contributions and is to be used for educational expenses.

Eligibility for financial aid, with the exception of some assistantships and scholarships, is based on demonstrated financial need. Family income, assets, and family size influence the demonstrated financial need of the student.

All documents, correspondence, and conversations among the aid applicant, his or her family, and the Financial Aid Office are confidential and entitled to the protection ordinarily arising from a counseling relationship.

In order to receive need-based financial aid, the student must:

1. Meet enrollment requirements for the specific aid program and must be making satisfactory academic progress. See the section entitled "Satisfactory Academic Progress Policy for Financial Aid" for a more detailed explanation of this requirement.
2. Submit a Pennsylvania State Grant and Federal Student

Aid application to Harrisburg and any application forms required for specific aid programs.

3. Submit a Financial Aid Transcript from all previously attended post-secondary educational institutions including all undergraduate institutions. This transcript may be obtained through the Financial Aid Office. Submit this transcript even if no aid was received at those institutions.
4. Submit any other requested documentation concerning financial and family circumstances that may be requested by the Financial Aid Office, or any agency that administers financial assistance programs. Financial aid applicants may be required to submit copies of their parents' I.R.S. forms or various other income documents.

The submission of the information described above does not automatically entitle a student to receive financial aid. The Financial Aid Office follows the regulations established by the federal government in awarding aid. Aid applicants are ranked according to unmet need (based on budget, federal and state grants, and expected family contribution) and available funds are offered to the neediest students first. Students must apply for financial aid each academic year.

Direct questions concerning financial aid to the Financial Aid Office, 138 Elsie O. Bull Center, West Chester University, West Chester, PA 19383 (215) 436-2627. Office hours are Monday through Friday, from 9 a.m. to 4 p.m.

### Satisfactory Academic Progress Policy for Financial Aid

The satisfactory academic progress policy for graduate students is defined below. This policy is subject to change because of revisions in federal regulations.

**FULL-TIME GRADUATE STUDENTS --** The student must have official permission from the University to enroll or continue enrollment as a degree student and must have successfully completed at least 18 credits during the previous academic year (fall-spring). Nine credits per semester is

considered to be full time for graduate students.

**PART-TIME GRADUATE STUDENTS -- ENROLLED FOR 1 to 5.5 CREDITS PER SEMESTER --** The student must have official permission from the University to enroll or continue enrollment as a degree student and must have successfully completed all credits attempted during the previous academic year (fall-spring).

**ENROLLED FOR 6 to 8.5 CREDITS PER SEMESTER --** The student must have the official permission of the University to enroll or continue

enrollment as a degree student and must have successfully completed at least 12 credits during the previous academic year (fall-spring).

The Financial Aid Office reviews the "successfully completed credits" requirement at the end of each academic year (spring semester).

Credits earned during the summer following an academic year will be used to make up a credit deficit during the review for financial aid satisfactory academic progress. The Financial Aid Office reviews the "official permission from the University to enroll or

continue enrollment as a degree student" requirement at the beginning of each semester. In other words, if the student moves from "degree" to "nondegree" status between the fall and spring semesters, the student will not be maintaining satisfactory academic progress, and spring financial aid will be rescinded. This particular item cannot be appealed.

**FAILURE TO MAINTAIN SATISFACTORY ACADEMIC PROGRESS ACCORDING TO THESE STANDARDS WILL RESULT IN THE LOSS OF FEDERAL TITLE IV FINANCIAL AID FOR AT LEAST ONE SEMESTER OR UNTIL SUCH TIME AS THE STUDENT IS AGAIN MAINTAINING SATISFACTORY ACADEMIC PROGRESS.**

#### DEFINITIONS:

**ENROLLMENT STATUS:** Full-time (nine or more credits per semester) or part-time (less than nine credits per semester).

**CREDITS ATTEMPTED:** Credits for which a grade of A, B, C, D, F, Withdraw Failing (WF), Incomplete (I), or No Grade (NG), has been received.

**SUCCESSFULLY COMPLETED CREDITS:** Credits for which a grade of A, B, C, or D has been received. Grades of NG or I do not count as successfully completed credits. Any withdrawal grades (Withdraw, Withdraw Passing, Withdraw Failing) do not count as successfully completed credits.

**FEDERAL TITLE IV FINANCIAL AID:** Stafford Student Loan (SSL), College Work Study, Perkins Loan, PLUS Loan, and Supplemental Loan (SLS).

**REPEATED CREDITS,** for purposes of determining satisfactory academic progress, will be treated in the same manner as they are treated under the WCU academic policies.

Generally, only those credits successfully completed at WCU are considered when reviewing the student's satisfactory academic progress for financial aid. However, if a student is unable to attend WCU during the summer to correct a "credit deficiency," he or she may obtain official University permission to take courses at another institution and then submit

those successfully completed credits to the Financial Aid Office for consideration in determining satisfactory academic progress. Any credits submitted for consideration must transfer to WCU and count towards the student's degree. Only credits taken during the summer will be considered.

**APPEALS TO THE SATISFACTORY ACADEMIC PROGRESS REQUIREMENTS:** An appeal to the satisfactory academic progress requirements must be made in writing and fully explain the reasons for the appeal. Accompanying this letter must be appropriate supporting documentation (letters from physicians, counselors, etc.). The Appeal Committee may request a personal interview with the student. The decision of the committee will be based on the legitimate merits of the appeal and will be final. Appeals, when granted, will be for ONE SEMESTER ONLY. Students who are granted appeals will be reviewed for the maintenance of satisfactory academic progress at the end of the "appeal" semester. Only ONE appeal will be granted during the course of the student's academic career at WCU.

### Academic Grade Level Requirements for SSL/PLUS/SLS Loans

In addition to the satisfactory academic progress requirements mentioned above, the SSL and PLUS programs require that a student advance to the next academic level for every \$7,500 (SSL graduate) / \$4,000 (PLUS or SLS) borrowed.

<i>Academic Level</i>	<i>Graduate Credits Earned</i>
<i>1st</i>	<i>0 to 17.5</i>
<i>2nd</i>	<i>18 or more</i>

### Withdrawal/Enrollment Change and Aid

Students who officially withdraw or change their enrollment status may be entitled to a refund of certain fees, according to West Chester University's policy. (See section entitled "Fees and Expenses.") If the student has been awarded financial aid for the semester in which the withdrawal or enrollment change occurs, a portion of the refund will be returned to financial aid

program funds. Financial aid refunds due to withdrawals or enrollment changes are processed in accordance with federal, state, and awarding agency guidelines and regulations. A student considering withdrawal or an enrollment status change should consult the Financial Aid Office to determine the impact of that action on current and future financial aid.

### Student Consumer Rights and Responsibilities

You have the right to ask a school:

1. The names of its accrediting organizations.
2. About its programs; its instructional, laboratory, and other physical facilities; and its faculty.
3. The cost of attendance and its policies on refunds to students who drop out.
4. What financial assistance is available, including information on all federal, state, local, private, and institutional financial aid programs.
5. What the procedures and deadlines are for submitting applications for each available financial aid program.
6. What criteria it uses to select financial aid recipients.
7. How it determines your financial need. This process includes how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc., are considered in your budget. It also includes what resources (such as parental contribution, other financial aid, your assets, etc.) are considered in the calculation of your need.
8. If you have a loan, you have the right to know what the interest rate is, the total amount that must be repaid, the length of time you have to repay the loan, when you must start repaying it, and any cancellation and deferment provisions that apply.
9. If you are offered a work study job, you have the right to know what kind of job it is, what hours you must work, what your duties will be, what the rate of pay will be, and how and when you will be paid.

10. To reconsider your aid package, if you believe a mistake has been made.
11. How the school determines whether you are making satisfactory academic progress and what happens if you are not.
12. What special facilities and services are available to the disabled.

You have the responsibility to:

1. Review and consider all information about a school's program before you enroll.
2. Pay special attention to your application for student financial aid, complete it accurately, and submit it on time to the right place. Errors can delay your receipt of financial aid.
3. Provide all additional documentation, verification, corrections, and/or new information requested by either the Financial Aid Office or the agency to which you submitted your application.
4. Read and understand all forms that you are asked to sign and keep copies of them.
5. Accept responsibility for the promissory note and all other agreements that you sign.
6. If you have a loan, notify the lender of changes in your name, address, or enrollment status.
7. Perform in a satisfactory manner the work that is agreed upon in accepting a college work study job.
8. Know and comply with the deadlines for application for aid.
9. Know and comply with your school's refund procedures.

### Perkins Loan Program

The Perkins Loan Program is a cooperative effort of the federal government and West Chester University which enables qualified students to secure educational loans under attractive conditions. Each borrower must:

1. Be enrolled or accepted in the institution participating in the program.
2. Demonstrate financial need.
3. Maintain satisfactory academic progress in the curriculum.

The combined total of undergraduate

and graduate loans cannot exceed \$18,000. Approval of loans depends upon the student's financial need and the availability of loan funds. A Pennsylvania State Grant and Federal Student Aid Application must be filed. For further information contact the director of financial aid.

### Stafford Student Loan

The Stafford Student Loan is a cooperative effort of private lending institutions and the state and federal governments which enables qualified students to secure long-term educational loans.

To be eligible for a loan, a student must:

1. Be accepted for enrollment in an approved institution or, if enrolled, be making satisfactory academic progress.
2. Be classified as at least a half-time student.

The maximum loan per academic grade level for full-time graduate students is \$7,500 or the cost of education, whichever is less. The total indebtedness permissible for all years of undergraduate and graduate study is \$54,750. Applications for this loan can be obtained at lending institutions (banks).

### Graduate Assistantships

A limited number of graduate assistantships are available to qualified, full-time graduate students. Interested students should consult their department chairperson or graduate coordinator and the Office of Graduate Studies and Sponsored Research to determine the availability of assistantships and their own eligibility. Assignments may involve part-time undergraduate teaching, participation in research projects, or other professional duties under faculty supervision.

Full graduate assistants, in return for 20 hours of assigned duties per week, receive tuition remission and a stipend of approximately \$3,500 for the academic year. Half-time assistantships involving 10 hours per week of assignments are also available that cover six credits of tuition remission and pay approximately \$1,750 for the academic year. Applications are

available in the Office of Graduate Studies and Sponsored Research. Special minority assistantships are available also.

For maximum consideration for support, applications for the fall semester should be submitted by late January, although some departments can consider assistantship applications at anytime.

### Institute for Women Graduate Grant

The Institute for Women at West Chester University offers an annual grant of \$500 to a woman graduate student who is accepted into a master's degree program at West Chester University. The award is based on high academic achievement; evidence of potential for contribution to the applicant's field of study; a record of leadership in school, community, church, or other setting; and evidence of service to others. Applications, including reference forms, are available from the Office of Graduate Studies and Sponsored Research. Completed materials must be submitted by *April 1*. Only students who have filed all required admission credentials and plan to enroll for a minimum of six graduate credits are eligible.

### College Work Study

Graduate students may apply through the Financial Aid Office for University or federal work study funds. A Pennsylvania State Grant and Federal Student Aid Application must also be filed.

### Physical Education Department Scholarship

One \$300 scholarship is awarded to a graduate student in physical education. Applications should be submitted to the chairperson, Physical Education Department.

### Special Education Department Scholarship

The Department of Special Education offers a scholarship of \$500 to be awarded annually to a select, nontraditional student. The award is made possible through the Military Order of

the Purple Heart, a veterans' organization chartered by Congress for armed forces personnel wounded in combat. Notification of the award will be made by March 1 of each year. Applications and further information are available from the chairperson, Department of Special Education.

### **Professor Russell Sturzebecker Scholarship**

The Professor Russell Sturzebecker Scholarship is a \$100 award made each semester to a "worthy and needy" graduate student in health and physical education. Through the generosity of Mr. John Unruh, the award is donated in honor of Professor Sturzebecker.

The recipient must be working full time in the field of health and physical education and must be a part-time student at West Chester University and working towards a master's degree in his or her professional field.

Graduate students who meet the criteria are invited to submit a letter of application for the scholarship along with a resume of their professional and academic status. These documents should be submitted to the chairperson of the Department of Physical Education before November 15 for the first semester, and before March 15 for the second semester.

Selections will be made by a committee of three graduate faculty members of the Department of Health and the Department of Physical Education.

Application forms are available from the Department of Physical Education.

### **Grace Cochran Research on Women Award**

An annual \$100 award in each division, graduate and undergraduate, is given for the best research on women. The award, sponsored by the Institute for Women, is given on Research on Women Day held in the spring of each year. Dr. Cochran, an eminent teacher and scholar, graduated from the West Chester State Normal School in 1906.

### **Dr. Charles S. Swope Scholarship Foundation**

The Memorial Scholarship Trust Foundation was established by Charles E. Swope and Richard M. Swope in memory of Dr. and Mrs. Charles S. Swope. Dr. Swope served as president of West Chester University for a quarter of a century. Applicants must be enrolled full time and graduates of West Chester University. Scholarships are \$1,000 each. Applications must be filed on or before April 1. Selection is made during May, with scholarships commencing in September.

### **Charles Mayo Scholarship**

A financial grant is awarded yearly to an upperclass or graduate student in political science in memory of Charles Mayo, former president of West Chester University. Funded by contributions, the award is administered by the political science faculty of the Department of Government and Planning. The value of the scholarship is approximately \$200.

### **Residence Hall Graduate Advisors**

Opportunities to serve as residence hall graduate advisors are open to all full-time graduate students. Advisors live in the University residence halls and assist the full-time, professional resident director in providing direction for the personal, social, and educational development of the resident students. These positions are full-time (25 hours a week), graduate assistantships that offer a stipend, tuition remission, and room and meal plan. Preference is given to students enrolled in a counseling or psychology program and to those with prior residence hall living experience. Applications may be made through the Office of Residence Life and Housing, Room 206, Sykes Union Building (215) 436-3307.

# Academic Information and Regulations

## **Time to Complete the Degree Program**

All requirements for the degree, including courses, comprehensive examinations, and thesis, must be completed within the six years immediately prior to the expected date of graduation. In cases of unusual circumstances, students may request an extension of time through the appropriate departmental graduate coordinator for recommendation and consideration by the dean of graduate studies.

See also "Degree Candidacy" and "Degree Requirements."

## **Classification of Students**

Students are classified as:

### **A. Degree Students**

#### *1. Full matriculation—*

granted to a student who meets all admission requirements.

#### *2. Provisional matriculation—*

may be granted to a student who:

- a. Has not taken the Graduate Record Examination, the Miller Analogies Test, or a specialized entrance examination required by the department concerned.
- b. Is unable to present all prerequisites required by the department.

c. Has certain other academic deficiencies.

d. Fails to meet the academic average required for a degree student.

Students must fulfill the conditions stipulated in their provisional acceptance by the time that application to degree candidacy is made. Credit earned as a provisional degree student may be accepted towards the degree only on recommendation of the student's advisor.

Note: Some programs do not grant provisional matriculation.

### 3. *Teacher certification*—

applies to students taking course work to gain teacher certification.

### 4. *Professional growth*—

students who take graduate course work but seek neither a degree nor certification.

## B. Nondegree Students

A student is quick-admitted to take a workshop or other credit-bearing class. Nondegree students may schedule up to six credits of course work on a nonmatriculated basis. Students taking only special courses, such as workshops, are the exception to this rule.

Nondegree students may also include applicants who fail to qualify as degree students and wish to reapply later for degree status.

Courses taken under nondegree status may not necessarily be applied to degree programs at a later date.

## Advisory System

All students will be assigned an advisor in the department of their chosen major. Students are expected to take the initiative in scheduling interviews with the advisors during their course study.

## Graduate Level Course Numbering System

500 Series Graduate level courses to which advanced undergraduates may be admitted.

600 Series Graduate courses not normally open to undergraduates.

Course numbering within a series is at the discretion of the department offering the courses.

## Undergraduate Courses for Graduate Credit

Some departments have identified selected undergraduate courses that may be taken by graduate students (under departmental advisement) for graduate credit. No more than six credits of specifically designated 400-level courses may be applied to awarding of the graduate degree. See departmental listings.

## Workshops

The number 598 following the departmental prefix indicates an "open"

workshop that allows the departments to offer a variety of short-term seminars in specific subjects under this designation. Such workshops may or may not carry credit in a graduate degree program.

## Student Load

The normal work load for a full-time student during the fall and spring semesters is nine semester hours. The load may be increased if approval has been obtained from the student's advisor.

During the summer session, the normal work load is one semester hour of work for each week of enrollment. Generally, students carry only one course during the Pre or Post Session. If permission has been given by the dean of graduate studies and sponsored research, students may carry more than six semester hours of work in the Regular Session.

## Course Credit by Examination

Credit by examination may not be taken for graduate course work.

## Transferring Credit from Other Institutions

West Chester students who wish to take course work at other institutions for credit at West Chester must first obtain approval from their chairperson or coordinator. Other restrictions and requirements are the same as those given in "Transfer of Credit," page 5.

## Change of Status

A provisional degree student who has met the various conditions stipulated at the time of admission may petition for full graduate standing by submitting a written request to the Office of Graduate Studies and Sponsored Research. Credit earned as a provisional degree student or as a nondegree student may be accepted in a degree program only upon the recommendation of the student's advisor. Provisional degree students should consult their advisors well in advance in order to select work appropriate for transfer toward the degree.

## Changing to Auditor Status

Before the end of the add period, a student may apply to become an

auditor by completing a Change In Class Status Form available in the Office of Graduate Studies and Sponsored Research and obtaining the necessary approval.

## Changes in Program

In order to change from one degree program to another, a student must submit an application to the Office of Graduate Studies and Sponsored Research. The student must meet all specific admission requirements of the program for which the change is requested. No fee is charged.

## Adding a Course

Students may add a course by filing a Schedule Change Form in the Office of the Registrar during the schedule change period.

## Dropping a Course

A. During the first week of a semester, or the equivalent time in summer sessions, a student may drop a course, thereby receiving no grade, by filing a Schedule Change Form in the Office of the Registrar during the schedule change period.

B. A grade of W will be entered on the academic record of any student who drops a course *between the end of the first week and before the end of the fifth class week* or the equivalent in summer sessions.

Students who drop a course *between the end of the fifth class week and the end of the tenth class week* will receive a grade of either Withdrawal Passing (WP) or Withdrawal Failing (WF) from the instructor, indicating that they were passing or failing the course at that time. A WP is not treated as a grade. A WF is computed as an "F." After the tenth week of classes, students will receive whatever grade the professor assigns (excluding WF and WP) but are not entitled to selectively withdraw from particular classes. STUDENTS WHO FAIL TO DROP A COURSE OFFICIALLY WILL RECEIVE A GRADE OF "F" FOR THE COURSE.

## Withdrawal from Courses in Summer Sessions

Students wishing to withdraw from summer sessions should follow the same procedure for withdrawal from a

course. Withdrawal deadlines are adjusted appropriately in accordance with the summer calendar.

## Withdrawal from the University

Students wishing to withdraw from the University should go to the Office of the Registrar and follow the prescribed procedures. If illness or some other emergency interrupts the student's work, he or she must notify the Office of the Registrar immediately. Unless a student withdraws officially, F grades will be recorded for unfinished courses. The student must also notify the Office of Graduate Studies and Sponsored Research.

## Leave of Absence

Students in a degree program who will not be registering for course work during a given semester should file a letter requesting a leave of absence with the dean of graduate studies. The letter should be filed in advance of the semester in which course work is halted. Approved leaves of absence do not release the student from the six-year time limitation stipulated for the completion of degree requirements.

## Grading System

The following grading system is used:

### Grade Definitions:

Grade	Quality Points	Percentage Equivalents	Interpretation
A+	4.33	97 or above	Excellent
A	4.00	93-96	
A-	3.67	90-92	
B+	3.33	87-89	Superior
B	3.00	83-86	
B-	2.67	80-82	
C+	2.33	77-79	Average
C	2.00	73-76	
C-	1.67	70-72	
D+	1.33	67-69	Below Average
D	1.00	63-66	
D-	0.67	60-62	
F	0	59 or lower	Failure
NG			No Grade
W			Withdrawal

WF	0	59 or lower	Withdrawal Failing
WP			Withdrawal Passing
Y			Administrative Withdrawal
AU			Audit

I (Incomplete): a temporary grade replaced by NG in 1980. NG (No Grade): given when you fail to complete course requirements by the end of a semester; see grade changes section listed below.

W (Withdrawal): given when you withdraw from a course between the end of the first and the end of the fifth class week of the semester or the equivalent in summer sessions.

WP and WF: See "Dropping a Course."

Y (Administrative Withdrawal): given under appeal when there are nonacademic mitigating circumstances and there is documentation that the student never, in fact, attended class.

Degree students must repeat any courses applied to the degree for which they have received a grade of less than C-. All grades received for a course will remain on the student's record, but only the second grade achieved will be used to calculate the cumulative and major averages. A form for reporting repeated courses, available from the Offices of the Registrar and Graduate Studies, must be filed with the registrar at the time of registration.

## Removing "No Grade" Designation

Students must complete courses for which they have received a No Grade (NG) within the first nine weeks of the next semester or the NG will become an F. The student may file a request with the dean of graduate studies for an extension of this time limit. This request must be endorsed by the faculty member who entered the NG. The nine-week requirement does not apply to independent study, thesis, research report, practicum, or recital credit.

## Grade Reports

Grade reports are mailed to the

student soon after the end of a semester or summer session. Students are reminded to check their reports against grade requirements and other regulations, as well as for accuracy, and to have their reports at hand when consulting with advisors.

## Obtaining Transcripts

Transcripts of work taken at West Chester may be obtained from the Office of the Registrar. A check or money order, payable to West Chester University, must accompany a written request that should include the period of attendance at the University, degree status, the curriculum pursued, Social Security number, and any change of name during enrollment. For a description of the transcript fee, see "Fees and Expenses."

## Changes in Name or Address

Students should immediately notify the Office of the Registrar, the Office of Graduate Studies and Sponsored Research, and their department of any change of address or change in name.

## Graduate Record Examination and Graduate Management Admission Test

Scores from the Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) are required for many degree programs. The prospective degree student should consult the appropriate program outline and schedule a test prior to matriculation.

Both tests are administered by the Educational Testing Service, P.O. Box 6004, Princeton, N.J. 08541-6004. For current information regarding application materials and test dates, contact the Counseling Center 215-436-2301. Application forms must be filed with the Educational Testing Service at least 15 days prior to the date of any examination.

The examinations may be taken at any of the testing centers designated by the Educational Testing Service. The GRE is administered periodically at West Chester — generally in October, December, February, April, and June. West Chester became a test center for the GMAT in fall 1989.



## Miller Analogies Test

Some degree programs require students to take the Miller Analogies Test, which is administered each week at the Counseling Center, Room 129, Lawrence Center. It requires less than two hours and is given by appointment. Students requiring the test should telephone the center (215-436-2301) well in advance to schedule a test date. Appointments are often booked several months in advance. The student must pay the \$30.00 fee in person at the time the test is taken at the Counseling Center.

## The Comprehensive (Area of Specialization Examination)

A comprehensive examination covers the student's major field and is constructed, administered, and evaluated by the faculty of the student's major department or program. Candidates must apply for the examination with the department. They are not eligible to take the examination prior to the semester in which all courses in the major discipline are completed.

## Other Examinations

Other examinations may be required of degree students. All requirements given under the heading of the particular program should be carefully noted.

## Research Requirements

Students should consult specific programs to determine whether independent study directed toward either the thesis or a research report is required, offered optionally, or omitted.

## Application for Graduation

Each candidate for a master's degree must submit the following items to the Office of Graduate Studies and Sponsored Research: (1) a form indicating intent to graduate, with a copy to the chairperson of the candidate's department; (2) a check for \$30 made payable to the Commencement Fund; (3) a Commencement Fund Invoice Form; (4) a Cap and Gown Order Form; and (5) a Public Relations News Release Form. All of these forms are available in a packet from the Office of Graduate Studies and

Sponsored Research. Deadline dates for applying to graduate are: May graduation — February 1; August graduation — June 1; December graduation — October 1.

## Submitting the Thesis for Binding

After approval by the department, theses **must** be typed in accordance with specifications that may be obtained from departmental offices or the Office of Graduate Studies and Sponsored Research. After the dean of graduate studies and sponsored research has approved the thesis, the student is responsible for transmitting all required copies to the library for binding.

## Second Master's Degree

Students wishing to obtain a second master's degree from West Chester University must meet all academic requirements set by the Office of Graduate Studies and the department concerned, and must earn a minimum of 24 credits beyond the hours applied toward the first master's. All new credits and additional departmental academic requirements must have been completed within a six-year period preceding the awarding of the second degree. In cases of unusual circumstances, a request for an extension of time may be made through the appropriate department for recommendation and consideration by the dean of graduate studies and sponsored research.

## Graduates Seeking Initial Teaching Certification

College graduates who wish to obtain initial teaching certification (Instructional I) should contact the Office of Certification, Recitation 201A.

## Permanent Teaching Certification

The Instructional II (Permanent) Certificate is a permanent certificate issued to an applicant who has completed three years of satisfactory teaching on an Instructional I Certificate, attested to by the superintendent of the school district in which his or her most recent service was performed, or, in the case of an interme-

diolate unit, the executive director, or in the case of an approved nonpublic school, the chief school administrator. In addition, the applicant must complete 24 semester hours of collegiate study at an approved four-year institution after receiving a baccalaureate degree.

IN-SERVICE PROGRAMS — The 24-semester-hour requirement may be satisfied, in whole or in part, through in-service programs approved by the Secretary of Education of the Commonwealth.

## Educational Specialist Certification

Commonwealth regulations also provide for certification as an educational specialist to those persons who successfully complete an approved program of study and have the recommendation of the training institution. The Educational Specialist Certificate is issued on two levels.

### Educational Specialist I (Provisional)

The Educational Specialist I Certificate is issued for entry into a professional position in the schools of the Commonwealth. The applicant must have completed an approved program of studies, possess a baccalaureate degree, and been recommended for certification by the preparing institution.

### Educational Specialist II (Permanent)

The Educational Specialist II Certificate is a permanent certificate issued to an applicant who has completed three years of satisfactory service on an Educational Specialist I Certificate, and who has completed 24 semester hours of post-baccalaureate or graduate study at a regionally approved institution. In addition, the applicant must have received the recommendation of the superintendent of the school district in which his or her most recent service was performed, or in the case of an intermediate unit, the executive director, or in the case of an approved nonpublic school, the chief school administrator.

On June 1, 1987, the Pennsylvania State Board of Education implemented revisions to the Pennsylvania Code.

These revisions require all students who apply for Pennsylvania teaching certificates to pass state competency tests in basic skills, general knowledge, professional knowledge, and specific knowledge of the subjects in which they seek teacher certification.

**As changes are made in requirements for all certification programs, it is the student's responsibility to meet those changes.**

### Professional Certification

Several departments and programs, in addition to offering degrees, offer professional certificates on completion of a prescribed course of study. Consult

the individual department or program listings regarding offerings.

### Directory Information

The Family Educational Rights and Privacy Act defines the term "directory information" to include the following categories of information: the student's name, addresses, telephone numbers, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent educational agency or institution attended by the student. The University will limit information that is made

public to categories such as these but will not necessarily publish all such information in every listing.

Students who **do not wish** to have any or all of such "directory information" published without their prior consent must file notice — undergraduates in the Office of the Registrar, and graduate students in the Office of Graduate Studies and Sponsored Research and Office of the Registrar. A signed, dated statement specifying items not to be published must be brought by the student to the appropriate office within the first 15 calendar days after the beginning of the fall semester.

# University Services and Student Living

## Francis Harvey Green Library

The Francis Harvey Green Library offers the graduate student an excellent environment for study and research. Housed in a modern, six-floor complex, the library contains a graduate study lounge, a seminar room, a special collections room, a map room, an instructional materials center with audio-visual facilities, a periodicals collection, and micro-reading facilities.

The general collection of 467,000 volumes and nearly 3,000 periodicals is augmented by an extensive micro-media collection of more than 350,000 volumes, including books, periodicals, newspapers, doctoral dissertations, maps, and an extensive collection of government publications. The total resources of over 817,000 volumes compare favorably with other major public and private research libraries in the West Chester area. The special collections include the Chester County Collection of Scientific and Historical Books; the Normal Collection (publications by faculty and alumni); the Ehinger Collection (a collection of historical books on physical education); the Biographies of the Signers of the Declaration of Independence by John

Sanderson; and the Shakespeare Folios. Also worthy of note are the collections of children's literature, instructional media and music, and the Philips collection of autographed books.

The University library, through its staff of 13 professional librarians, provides the services required by students and faculty working in all areas covered by the University's instructional programs. Among the many services are reference, computerized on-line literature searching, interlibrary loan, and photoduplication. Use of the library is enhanced by an online catalog, automated circulation system and a computerized network of indexes and abstracts on CD-ROM.

## Housing

West Chester provides housing facilities for its graduate students on a limited basis for the regular school year and all summer sessions. Graduate students are housed in undergraduate halls with 24-hour quiet hours. All students living in the residence halls must be on a University meal plan. Upon acceptance to graduate school, students may contact the Office of Residence Life and Housing for on-campus housing. Residence hall rooms are all double-occupancy. Graduate students are ex-

pected to abide by the same housing regulations governing undergraduate students.

For assistance in locating an apartment or dwelling off-campus, students may contact the Office of Off-Campus and Commuter Life.

Both the Office of Residence Life and Housing and the Office of Off-Campus and Commuter Life are located in 206 Sykes Union Building, Rosedale Ave. 215-436-3305.

## Student Health Services

Two full-time physicians, a nurse practitioner, and five registered nurses are available to meet emergency and first-aid needs and to perform routine treatment of minor illnesses and minor surgical conditions. The University does not furnish other medical care or bear the costs of medical or surgical treatment or hospitalization. The community of West Chester has qualified physicians and excellent facilities at the Chester County Hospital.

Student Health Services is located in Ramsey Hall lower level and is open Monday through Friday from 8 a.m. until midnight, and Saturday and Sunday from 10 a.m. to 6 p.m. Any emergencies during the night must be treated at the Chester County Hospital



## University Policy for Storm Closings

When storm conditions affect the operation of the University, announcements are made over local radio and TV stations via a system of code numbers keyed to affected schools. Prefixes indicate whether the school will be closed or open later than usual. West Chester's numbers and applicable prefixes are:

853—University Number; this number with no prefix indicates classes will be cancelled for the day.

2853—Evening classes will be cancelled.

5853—School will open 1 hour late.

6853—School will open 2 hours late.

On Tuesday or Thursday, either a two-hour delay or class cancellation will be called. Two-hour delays on these days will mean that 8 a.m. classes are cancelled and the class normally starting at 9:30 a.m. will start at 10 a.m. and continue to 11 a.m.

On Monday, Wednesday, or Friday, a one-hour delay means that the 8 a.m. class is cancelled. A two-hour delay means that both the 8 a.m. and 9 a.m. classes are cancelled.

Emergency Room. The Health Service phone number is 436-2509.

Graduate students, their spouses and dependents may take advantage of a group medical illness and accident insurance policy approved by the University. Under the same group plan, there is a separate summer policy. See the Student Health Service for information and brochures.

Faculty and staff are treated for emergencies **only**.

## Information Services

Information Services provides computing resources for a wide variety of users, both academic and administrative. Many of the University's administrative functions, such as registration, grade reporting, and billing depend heavily on the campus-wide transaction processing system, which provides centralized access to University data from workstations located throughout the campus.

More importantly, computing is a vital instructional and research tool. Information Services offers students and faculty a wide range of computing resources, including a mainframe, microcomputers, printers, plotters, graphics workstations, digitizers, and optical scanners. Many of these facilities are available at various campus locations, but the Academic Computing Center on the third floor, F.H. Green Library, serves as a focal point of instructional computing activity. A valid WCU ID card is required to use the Academic Computing Center. (For further information, contact the Academic Computing Center at 215-436-3349.) Computing facilities throughout the campus are

joined by the Mainframe Network and the Information Services Network. The Mainframe Network provides medium-speed access to computers from workstations on campus. Off-campus users can also access computing resources through modern facilities connected to this network. The Mainframe Network provides electronic mail capabilities for all campus workstations, as well as access to the University's main library catalogs.

The Information Services Network (ISN) provides high-speed access to software applications (programming languages, spreadsheets, word processors, faculty-developed programs, etc.) and electronic communications capabilities to workstations and off campus. Student laboratory facilities are available in the Academic Computing Center and in each of the eight residence halls. Access to the ISN is also available to any workstation in a dormitory room or a faculty/staff office.

Students interested in acquiring a working knowledge of several commonly used software packages are encouraged to enroll in the introductory computing course, CSC501, offered by the Department of Mathematics and Computer Science.

Major hardware facilities include an IBM 4381 mainframe, numerous Banyan/Vines file servers, and IBM, MacIntosh, Apple, Zenith, and NeXT microcomputers. Letter-quality laser printers are also available for student use.

Information Services is located in 107 Elsie O. Bull Center, 215-436-2828.

## Career Development Center

The University provides career plan-

ning and placement services for its students and graduates.

The Career Development Center's library provides information about careers, federal and state government positions, application forms, procedures, and job requirements.

The Center also maintains listings of job vacancies in business, education, and industry.

The services available to graduate students include: credential file development; career counseling; resume referral; and an on-campus interview program, which includes interviews arranged by the Career Development Center; and the use of private facilities for on-campus interviews arranged by the applicant. A fee is charged for the development and service of a credentials file.

The Career Development Center is located in Lawrence Center, Room 106, 215-436-2501.

## Speech and Hearing Clinic

The Speech and Hearing Clinic, located on the second floor of Wayne Hall, is operated by the Department of Communicative Disorders as a teaching-training facility for its undergraduate and graduate students. The clinic provides diagnostic and therapeutic services for persons with speech, language, and hearing problems. These services are provided free of charge to West Chester University students, faculty and staff, and to students enrolled at Cheyney University. A fee is charged to others who wish to use the services of the clinic.

## Women's Center

The Women's Center addresses the

special concerns of the increasing number of women students who enter West Chester University from high school or who return to school after time at home or in the job world. Located in Lawrence Center, the Women's Center provides a lounge area for conversation, study, peer advising, and special interest programs (lectures, films, etc.). For more information call 215-436-2122.

The Women's Center also runs the Children's Center for the children of West Chester University students and employees. The children participate in educational and developmental programs while their parents are in class or at work. The center is licensed by the Commonwealth of Pennsylvania and all required registration materials must be completed prior to enrollment in the center. The center offers reduced rates to students and multiple child discounts. For more information contact the Children's Center at 436-2388 or the Women's Center at 436-2122.

### **Graduate Student Association**

The Graduate Student Association (GSA) is the student government of the graduate program. The primary objective of GSA is to promote the overall well-being of graduate students at West Chester University. All graduate students are members of the association by virtue of their graduate status. The GSA office is located in Room 229 of Sykes Union.

### **Black Student Union**

The Black Student Union, which was formed in 1971, is dedicated to the creation of a culturally meaningful atmosphere for black students at West Chester. Black Student Union membership is open to all West Chester students, faculty, and staff — regardless of race, color, or creed — who have a concern for black social, political, cultural, and economic causes.

A major purpose of the organization is to broaden and enhance the academic and social life for black students at the University. The union's democratically structured constitution provides for an executive board, elected by the membership. Applications for mem-

bership in the Black Student Union are reviewed by the executive board. Applications for membership may be made at the Black Student Union Office in Sykes Union Building, Room 231.

### **Institute for Women**

The Institute for Women is an independent group designed to represent the interests of women on the campus. It serves as the parent organization for the Women's Center, the Women's Studies Program, and the Title IX and Sex Discrimination Board. The institute is headed by a director and a board of directors.

The institute sponsors a number of activities to enhance the self-esteem and career success of women at the University: the Woman-in-Residence Program, Grace Cochran Research on Women Award, Visiting Professor Program, Graduate Grant, and Endowed Book Fund. The institute prepares periodic reports on the status of women at the University and also secures Charlotte W. Newcombe Scholarship Grants for mature second-career women. The Institute for Women is located in 211 Main Hall. For more information call 215-436-2464 2122.

### **Veterans Affairs**

Under the provisions of Title 38, West Chester University is an accredited university for the education of veterans. The University cooperates with the Veterans Administration to see that honorably separated or discharged veterans receive every consideration consistent with either degree or nondegree admission standards.

All veterans, certain dependents of disabled or deceased veterans, and war orphans who wish to obtain educational benefits under the appropriate public laws must register with the Veterans Affairs Office at initial registration. Veterans must renew their registration with this office at the beginning of each subsequent semester and each summer session. The Veterans Administration requires students who are veterans to schedule at least nine credits per semester in order to receive full benefits under the G.I. Bill.

A representative of the Veterans Administration is in the Financial Aid Office in the Elsie O. Bull Center, Room 138, to counsel and act as a liaison between students and the Veterans Affairs Office in financial and other matters.

### **Honor Societies**

The University participates in sponsoring an active chapter of Phi Delta Kappa, the international graduate honor society. Membership in the West Chester chapter, which was organized in 1956, is by invitation and recognizes scholarship in all fields of study.

Graduate students are eligible to participate in the activities of the undergraduate honor societies at West Chester if they are members. These organizations are: Alpha Epsilon, Alpha Kappa Delta, Alpha Lambda Delta, Alpha Mu Gamma, Alpha Psi Omega, Eta Sigma Gamma, Gamma Theta Upsilon, Kappa Delta Pi, Pi Gamma Mu, Phi Kappa Delta, Pi Kappa Delta, Pi Kappa Lambda, Pi Mu Epsilon, Phi Alpha Theta, Phi Delta Kappa, Phi Epsilon Kappa, Phi Mu Alpha Sinfonia, Phi Sigma Tau, Psi Chi, Sigma Alpha Iota, Sigma Tau Delta.

### **Student Activities Council**

The student Activities Council is a major organization funded through the Student Government Association's activity fee. Its goal is to develop an on-going series of cocurricular activities that complement the academic experience, providing events that are entertaining and intellectually fulfilling. The council strives to achieve this end through the mediums of the visual arts (film and video); the performing arts (lecture, theatre and dance); and contemporary performances (concert and cabaret).

### **Recreational Services**

The Office of Recreational Services provides leisure activities for the University community. Recognizing that the needs of individuals differ, activities are provided in four program areas:

The *Recreational Sports (Intramurals) Program* affords students the opportunity to participate in individual and or

group competitive experiences. The Intramurals Program seeks to promote health and encourage the wise use of leisure time. The program is designed for those students who do not have the time, desire, or ability to take part in intercollegiate athletics. Students can select from more than 20 individual and team sports. Participation is open to all students, regardless of ability.

Students who enjoy organized sports other than varsity teams can participate in the *Sports Club Program*, designed for highly experienced players and for those merely interested in learning a new sport to have fun or to increase their skills. Joining a club provides opportunities for instruction, coaching, socialization, and fun. Physical education majors receive a sports credit through participation in a club program. West Chester University sponsors the following clubs: fencing, ice hockey, karate, rugby, ski, women's soccer, water polo, and equestrian.

*Outdoor recreation opportunities* are conducted through the Outdoor Resource Center. Canoeing, bicycle touring, rafting, caving, cross country skiing, backpacking, and summer/winter camping are among the many activities offered through the Outdoor Resource Center for both novices and seasoned outdoor adventurers.

*Open recreation* provides students who are not interested in participating in formal recreation activities use of facilities for free play. In addition, special events, including an extensive aerobics program, are conducted throughout the year and are open to the University community.

The Office of Recreational Services is located in Ehinger Gymnasium, 215-436-2133.

## Counseling and Psychological Services Department

The Counseling and Psychological Services Department, housed in the Counseling Center, is located on the second floor of Lawrence Center. The Counseling Center provides counseling services to all undergraduate and graduate students at West Chester. The CPS faculty includes licensed psychologists who are experienced in working with college students. Students may discuss their concerns, feelings, hopes, and interests freely and in strict confidence.

### COUNSELING SERVICES

Since the Counseling Center provides services for a wide range of concerns, each student's experience will be tailored to his or her request. Students may want to clarify their vocational or educational choices, improve their interpersonal skills, or resolve personal conflicts. Their choice of approach could include one or more of the following counseling center services:

1. *Individual vocational counseling* consists of a one-to-one counseling experience that focuses upon the student's choice of major and vocation. Vocational choice is most solid when it is the outgrowth of understanding one's self. Such understanding requires time and thought and involves the student's identifying his or her own style, values, interests, and abilities. Psychological testing as well as discussion often enhances self understanding.
2. *Individual counseling for personal problem solving* consists of a one-to-one counseling experience where the focus is upon resolving personal conflicts and conflicts with others, and upon improving the student's expertise at making personally meaningful choices. It may also help some people avoid making decisions that may restrict their personal growth and undermine their well-being.
3. *Group counseling* consists of a small group of peers with one or more counselors. Such groups usually meet once each week to provide group members with constructive learning about themselves. Groups often have a specific focus. Past groups have focused upon:
  - Elimination of self-defeating behavior
  - Assertiveness training
  - Anxiety management
  - Test anxiety reduction
  - Eating disorders
  - Career exploration
  - Procrastination — how to avoid it
4. *Testing* — Information from psychological tests can be useful in increasing self understanding and can often assist in the process of vocational and educational decision making. Faculty members of the Counseling and Psychological Services Department are trained in the administration and interpretation of psychological tests. The student and his or her counselor can decide whether testing might be helpful. Arrangements can also be made at the Counseling Center for taking the Graduate Record Exam, Graduate Management Admissions Test, and the Miller Analogies Test — three graduate school admissions tests.
5. *Consultation Services* — Faculty members in the Counseling Center also are available to consult with staff and faculty members of the college community. They can assist with crises, program planning, group and interpersonal communications, and referral to other agencies.

# Structure of the University

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## COLLEGE OF ARTS AND SCIENCES

Richard H. Wells, *Dean*

Anthropology and Sociology	History
Art	Mathematics and Computer Science
Biology	Philosophy
Chemistry	Physics
English	Psychology
Foreign Languages	Speech Communication and Theatre
Geology and Astronomy	

## SCHOOL OF BUSINESS AND PUBLIC AFFAIRS

Linda Pickthorne Fletcher, *Dean*

Accounting	Management
Criminal Justice	Marketing
Economics	Political Science
Geography and Planning	Social Work

## SCHOOL OF EDUCATION

Michael L. Hanes, *Dean*

Childhood Studies and Reading	Instructional Media
Counselor, Secondary and Professional Education	Special Education

## SCHOOL OF HEALTH SCIENCES

Douglas P. McConatha, *Interim Dean*

Communicative Disorders	Nursing
Health	Physical Education

## SCHOOL OF MUSIC

Edward A. Barrow, *Interim Dean*

Instrumental Music	Music Theory and Composition
Keyboard Music	Vocal and Choral Music
Music Education	
Music History	

# Programs of Study and Course Offerings

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## Guide to the Catalog

The arrangement of course offerings is alphabetical by either department or program of study.

Students may obtain a typical sequence of courses for any program from the office specified in this catalog.

Please note that all courses, course descriptions, course sequences, and course substitutions are subject to change. Current information is available from the appropriate department chair, dean, or program coordinator.

For a guide to course prefixes, see page 87.

## Accounting - See Business

## Administration

105 Ruby Jones Hall

West Chester University

West Chester, Pennsylvania 19383

(215) 436-2438

Dr. James S. Milne, *Program Director*

### CONCENTRATION ADVISORS

Dr. Douglas McConatha, *Health Services Administration  
Long-Term Care*

Dr. Arlene C. Rengert, *Leadership For Women*

Dr. Louis Weislogel, *Individualized*

Dr. Philip K. Duncan, *Psychology/Personnel Administration  
Training and Development*

Mr. A. Wayne Burton, *Public Administration*

Ms. Cheryl Hodgins, *Social Work*

Dr. Monita Lank, *Sport and Athletic Administration*

Mr. F. Robert Bielski, *Urban and Regional Planning*

### MASTER OF SCIENCE IN ADMINISTRATION

The Departments of Geography (Urban and Regional Planning), Health, Physical Education, Political Science (Public Administration), Psychology, Speech Communication and Theater, and Social Work offer programs leading to a Master of Science in Administration (M.S.A.) with areas of concentration in Health Services Administration, Long-Term Care, Leadership for Women, Individualized, Psychology/Personnel Administration, Training and Development, Public Administration, Sport and Athletic Administration, Social Work, and Urban and Regional Planning.

The degree is designed for persons with work-related experience desiring to enhance their administrative skills at the supervisory and mid-management levels. It is recommended that applicants have a minimum of three years, full-time work experience prior to matriculation. Those persons who lack the requisite work experience and/or plan to change careers may need to incorporate relevant internships and other job experiences into their programs, which may require program enrollment beyond the minimum requirements stipulated in this catalog.

The program consists of an 18-hour administrative core of courses plus 18-24 semester hours of courses in a selected concentration area as follows:

1. Administrative Core (Required): ADM 501, 502, 503, 504, 505, and either 506 or 507
2. Area of Concentration\*
  - a. Health Services Administration (See page 57.)
  - b. Leadership for Women (See pages 62.)
  - c. Public Administration (See pages 78-79.)
  - d. Psychology/Personnel Administration (See page 80.)
  - e. Social Work (See pages 82-83.)
  - f. Sport and Athletic Administration (See page 76.)
  - g. Urban and Regional Planning (See page 53.)
  - h. Long Term Care (See page 57.)

\* Refer to departmental listings for concentration course descriptions

- i. Training and Development (See page 24.)
- j. Individualized (See page 25.)

### CERTIFICATE IN ADMINISTRATION

Persons who wish to fulfill only the Administrative Core may do so and receive a Certificate in Administration. Those interested in this option must meet the same admission criteria as full degree students; persons with previously earned master's degrees can most benefit from this option.

Degree students may also receive the certificate after completion of the administrative core requirements.

To be eligible for the certificate, students must have completed each required Administration (ADM) core course with a minimum grade of "B." Application forms are available at the M.S.A. Office and must be submitted to the M.S.A. director for processing. This procedure is independent of the graduation process.

### ADMISSION

Applicants must submit official undergraduate transcripts denoting: receipt of bachelor's degree and majors from all undergraduate institutions attended; scores from the \*Miller Analogies Test, Graduate Record Examination or Graduate Management Admissions Test; an essay with a clear focus on career plans; and two letters of reference from professional supervisors that address the applicant's administrative potential. All application materials are to be submitted to the Graduate Office and labeled: "Attention, M.S.A. Application of (student's name)." After these materials have been received by the Graduate Office, the M.S.A. director will schedule an admissions interview with the applicant.

### DEADLINE FOR APPLICATIONS

Normally, the application process must be completed and admission granted prior to course enrollment for the fall or spring semester. The deadline for applying for the fall semester is July 15, and the deadline for the spring semester is November 15. With the approval of the MSA director, late applicants may register for one semester of course work, pending completion of the admission requirements.

The M.S.A. program does not permit students to remain in nondegree status, nor does it accept "quick admit" cards. All applications must be submitted on the approved WCU Graduate Application forms available from the Graduate Office.

### COMPREHENSIVE EXAMINATION

No comprehensive examination is required for the administrative core. However, in lieu of the examination, each of the six administrative core courses must be completed with a grade of at least "B."

Selected concentrations in the M.S. in Administration program do require comprehensive examinations. Students are obligated to comply with concentration comprehensive examination policies in effect on the date of their admission to the program. Students must clarify the requirements for their programs with the appropriate concentration advisor.

\* Diagnostic test scores are not required for persons who have already been awarded a master's degree

**COURSE DESCRIPTIONS****ADMINISTRATION**

Symbol: ADM

**501 Administrative Theory and Environment (3)**

Organizational theory and practice in public and private institutions. Legal framework for administration, application of public policy, sociolegal issues, and values of society considered.

**502 Computers for Managers (3)** Quantitative applications in administration. Computer as a management tool. Computer basics and management information systems.

**503 Accounting/Budgeting (3)** A study of

accounting principles and procedures for both profit and nonprofit organizations. Emphasis is on the concepts and effects of accounting policies and procedures with which the administrator will normally come into contact

**504 Communication for Administrators (3)**

Development of communication skills for the effective writing of letters, memos, reports, and proposals. Structuring and conducting meetings and presentations.

**505 Organizing Human Resources (3)**

Administrative models and concepts of human behavior in formal organizations and decision processes. Personnel administration. Effective selection, use, and development of human

resources for the total organization. Affirmative action and equal opportunity.

**506 Budgetary Process (3)** Budget forecasting and implementation. Analysis, planning, and control of sources and allocation of funds. Measurement and control mechanisms such as Program Planning Budgeting System (PPBS), Zero-Base Budgeting (ZBB), and Management by Objective (MBO) emphasized.

**507 Liability for Managers (3)** Study of the law of civil and criminal liability of managers in the profit and not-for-profit sections. Review of the law of defense and liability protection for individual and organization.

**Training and Development**

Dr. Phillip Duncan, *Program Concentration Advisor*

Dr. Milne, *Director, Master of Science in Administration*

Training and Development is a concentration within the Master of Science in Administration program. The thrust of this concentration is to prepare training and development supervisors who, in turn, will develop and coordinate in-house programs, staff development services for line managers.

**CURRICULUM****1. Administration Core**

18 semester hours

A. Must take all 15 credits:

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting/Budgeting (3)

ADM 504 Communication for Administrators (3)

ADM 505 Organizing Human Resources (3)

B. Must select three credits:

ADM 506 Budgetary Process (3)

ADM 507 Liability for Managers (3)

**2. Training and Development Core**

18 semester hours

A. Must take all 12 credits:

PSY 563 Performance Analysis (3)

PSY 567 Training and Psychology (3)

SPC 503 Communication and Persuasive Influence (3)

SPC 506 Communication in Small Groups (3)

B. Must select six credits chosen under advisement

C. Internship (3-6 credits):

ADM 612 Internship (3-6 credits)

(Required only for students who lack appropriate experience)

**3. NOTE:** Combined with an administration core of 18 required credits, the M.S.A./Training and Development concentration would require a minimum of 36 credit hours, exclusive of internship.

**COURSE DESCRIPTIONS****PSYCHOLOGY**

Symbol: PSY

**563 Performance Analysis (3)** An accomplishment-based approach to the analysis of human performance. Topics include measurement and analysis of performance opportunities, and strategies for improving performance.

**567 Training and Psychology (3)** An overview of the training process in organizations. Topics range from needs analysis to evaluation of training programs.

**SPEECH COMMUNICATION**

Symbol: SPC

**503 Communication and Persuasive**

**Influence (3)** An analysis of major conceptual

approaches to persuasion and their implications for understanding influence contexts and designing pragmatic strategies.

**506 Communication in Small Groups (3)** An examination of traditional and contemporary research that pertains to various dimensions of small group communication including, but not limited to, the following topics: structure, size, tasks, goals, roles, systems, and leadership.



## Master of Science in Administration Individualized Concentration

Dr. Weislogel, *Program Concentration Advisor*

Dr. Milne, *M.S.A. Director*

This concentration is designed for those persons who have achieved a high level of career success in their chosen fields. Those admitted will have evidenced significant career mobility and will be enhancing their knowledge base by enrolling in an individually developed set of courses after it has been proposed and approved by the concentration advisor and a contractual agreement developed.

### CURRICULUM

#### 1. Administration Core 18 semester hours

- A. Must take all 15 credits:
  - ADM 501 Administrative Theory and Environment (3)
  - ADM 502 Computers for Managers (3)
  - ADM 503 Accounting/Budgeting (3)
  - ADM 504 Communication for Administrators (3)
  - ADM 505 Organizing Human Resources (3)
- B. Must select three credits:
  - ADM 506 Budgetary Process (3)
  - ADM 507 Liability for Managers (3)

#### 2. Individualized Core

18 semester hours

- A. Required (3 credits)
  - ADM 600 Research Report
  - To encompass career goal theme (3)
- B. Electives (15 credits)
  - Subject to advisement/acceptance of an approved personal program proposal. Courses to be approved from among 500-600 level WCU graduate courses designed to fulfill the personal program proposal as approved.
- C. Internship (3-6 credits)
  - Required for students without sufficient, relevant administrative experience. Internships are in addition to the 15 credit hours of electives for such students. Students with sufficient management experience may enroll for relevant internships as part of the 15-hour elective credit requirement, provided the work requirements of such are different from enhancements of the person's normal work assignments (i.e., students cannot earn internship credit by performing their normal work responsibilities).
  - The M.S.A./Individualized internship arrangement/requirements are to be confirmed in writing either by the concentration advisor or the M.S.A. director.

## Anthropology and Sociology

101C Old Library Building  
West Chester University  
West Chester, PA 19383  
(215) 436-3500

Dr. Shaffer, *Chairperson*

### PROFESSORS

Marshall J. Becker, Ph.D., *University of Pennsylvania*  
Harvey C. Greisman, Ph.D., *Syracuse University*  
Nelson W. Keith, Ph.D., *Rutgers University*  
Glenn W. Samuelson, Ed.D., *University of Maryland*  
Leigh Shaffer, Ph.D., *Pennsylvania State University*  
Paul A. Stoller, Ph.D., *University of Texas*

### ASSOCIATE PROFESSORS

Patrick W. Luck, Ph.D., *University of Connecticut*  
Dimitri I. Monos, Ph.D., *University of Pennsylvania*  
Martin Murphy, A.M., *University of Michigan*  
Bonita Freeman-Whitthoft, Ph.D., *University of Pennsylvania*

### ASSISTANT PROFESSORS

Jon A. Cowen, A.M., *University of Pennsylvania*  
Edmundo Morales, Ph.D., *City University of New York*  
The Department of Anthropology and Sociology offers, on a limited basis, graduate courses in anthropology and sociology to graduate students from other areas as well as to advanced undergraduate majors and nonmajors.

### COURSE DESCRIPTIONS

#### ANTHROPOLOGY

Symbol: ANT

**512 Ethnographic Studies (3)** Intensive survey of a single culture area. Area for study announced in advance.

**515 Problems in Anthropology (3)** Perennial issues in anthropological explanation.

**555 Proseminar in Urban Anthropology (3)** Application of techniques of anthropological field investigation to the analysis of urban environments.

**580 (also LIN 580) Language and Culture (3)** See LIN 580.

**595 Seminar in Anthropology (3)** PREREQ: Permission of instructor.

**599 Independent Studies in Anthropology**

**(1-3) PREREQ:** Approval of instructor and department chairperson.

#### SOCIOLOGY

Symbol: SOC

**515 Mental Illness in Social Context (3)** A sociological perspective on the cause and treatment of mental disorders, including a critical analysis of public policy on mental health services.

**521 Youth and Delinquency (3)** Juvenile delinquency as a form of social deviance; theories of causation and control.

**531 Social Problems (3)** Analysis of how things come to be defined as social problems.

**532 History of Sociological Theory (3)** Development of sociological thought.

**533 American Minorities (3)** Racial and ethnic group relations.

**538 Crime and Justice (3)** A sociological analysis of criminal law, crime statistics, causes of crime, and the administration of criminal justice.

**539 Deviance and Control (3)** An advanced analysis of social deviance and control.

**540 (also LIN 540) Sociolinguistics (3)** See LIN 540.

**543 The Sociology of Complex Organizations (3)** The sociological analysis and study of complex organizations. PREREQ: Advanced undergraduate or graduate standing and at least six credits in sociology, including SOC 200 or its equivalent, or consent of instructor.

**550 Seminar in Sociology (3)** PREREQ: Permission of instructor.

**590 Independent Studies in Sociology (1-3)** PREREQ: Approval of instructor and department chairperson.

## Art

Mitchell Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2755

Mr. White, *Chairperson*

### PROFESSORS

Gus V. Sermas, M.F.A., *University of Wisconsin*  
Ruth I. Weidner, M.A., *University of Delaware*

### ASSOCIATE PROFESSORS

Victor Lasuchin, M.F.A., *University of Pennsylvania*

Carolyn G. Simmendinger, M.F.A., *Tyler School of Art*  
Linwood J. White, M.F.A., *University of Pennsylvania*

### ASSISTANT PROFESSORS

John Baker, B.A., *West Chester University*  
Richard E. Blake, B.F.A., *Tyler School of Fine Arts*  
Ronald N. Defino, M.F.A., *Tyler School of Art*  
Belle C. Hollon, M.F.A., *University of Wisconsin*  
Margaret Schiff, M.F.A., *Syracuse University*  
Mary Stieber, M.A., *University of Pittsburgh*  
The Department of Art offers, on a limited basis, graduate courses in art to graduate students from other areas.

### COURSE DESCRIPTIONS

#### ART HISTORY

Symbol: ARH

**576 Primitive Art (3)** Ritual and myth from prehistory to early Ancient Near East; contemporary primitive cultures; psychological and psychoanalytical interpretations; comparison with phenomenon of primitivistic interests of the West.

**580 European and U.S. Art (3)** For the student who is deficient in art history and wishes to augment his or her field (e.g., social studies, literature, philosophy). Analysis of the major forms and styles from Renaissance to present.

**596 Introduction to Aesthetics (3)** Introduction to the aesthetic theories and art forms in the context of social change, philosophy and sciences, creation, and the creative process.

**597 History of Aesthetics and Art Criticism (3)** Philosophical theories of art production from Ancient Greece through the 19th century. Relationship of aesthetic experience to forms and to technical, psychological, and cultural values.

#### ART

Symbol: ART

**516-517 Painting I-II (3) (3)** Extensive experimentation in studio problems and directions. The strategies of technique and a personal style are explored. Each section of this course varies with the instructor.

**520 Painting: Independent Projects (3)** Individualized instruction at an advanced level. Development of professional, personal, and imaginative statements leading to formation of student's pictorial identity.

**521 Sculpture I (3)** Introduction to sculpture via the fundamentals of 3-D design. Use of basic tools, development of skills, techniques, and processes in creating sculpture. Projects in plaster, clay, stone, and wood.

**522 Sculpture II (3)** Advanced problems in

sculpture; continuing exploration of form, structure, process. Use and maintenance of tools. Materials, their origins and supply sources. Projects in clay, stone, wood, plastic, plaster, wire, and new materials.

**525 Multi-Media Workshop in Sculpture III (3)** Fabrication methods and techniques, using wood, plastic, and various metals.

**531 Ceramics I (3)** Ceramic techniques and aesthetics of clay, leading toward development of creative expression. Exercises in hand-built and wheel-thrown forms. Formulation of clay bodies, glaze bodies, and calculations; loading and kiln firing techniques. Also, basic exercises for elementary and secondary teaching levels.

**532 Ceramics II (3)** Further development of expression for those who have mastered basic ceramic processes. Research in clay bodies, glaze chemistry, firing techniques, and kiln construction. Creative problems.

**533 Ceramics: Studio Problems (3)** Individual projects involving the total or specialized areas of the ceramic process. Practical experience through helping to maintain the ceramic complex.

**534 Ceramics: Independent Projects (3)**

**541 Printmaking: Relief, Independent Projects (3)** Advanced study with individualized instruction. Collagraph, lino-cut, and woodcut techniques. Combining various printing processes with relief printmaking.

**542 Printmaking: Silk-Screen, Independent Projects (3)** Advanced study with individualized instruction. Technical and aesthetic possibilities including photo-stencil. Incorporation of silk-screen with other printmaking processes.

**543 Printmaking: Intaglio, Independent Projects (3)** Advanced study with individualized instruction. Relief etching and basic intaglio techniques for work on metal plates. Drypoint, straight line etch, soft and lift grounds, aquatint, and engraving. Combining various printing processes with intaglio printmaking.

**544 Printmaking: Lithography, Independent**

**Projects (3)** Advanced study with individualized instruction. Aluminum plate and stone lithography techniques. Combination of various printing processes with lithography.

**546 Drawing: Independent Projects (3)** Advanced study with individualized instruction. Emphasis on professional, personal, and imaginative statements leading to the student's iconographic identity.

**547 Two-Dimensional Design: Independent Projects (3)** Advanced study with individualized instruction. Design elements and analytical principles of organization. Emphasis on professional, personal, and creative statements leading to (formation of) professional employment.

**549 Graphic Design: Independent Projects (3)** Advanced study with individualized instruction. Developing means for solving communication problems of diverse character with emphasis on practical application. Projects are refined into portfolio presentations for professional employment.

**551 Art Education in the Elementary School (3)** Current trends in art education for the elementary school.

**565 Crafts: Independent Projects (3)** Projects involve varied media and their techniques and processes. Exploration of 2-D and 3-D crafts and their application in recreational and elementary school programs.

**566 Crafts: Weaving I (3)** Basic techniques of weaving are explored with emphasis upon fabric design and craftsmanship.

**567 Crafts: Weaving II (3)** Provides opportunities for the weaver to further explore and develop skills as a designer. Emphasis is placed on the interrelationships between functional materials and design processes.

**568 Crafts: Weaving III (3)** To resolve advanced weaving problems in projects of an individual, creative nature leading to practical application.

**590 Independent Studies in Art (1-3)**

## Astronomy - See Geology and Astronomy

## Biology

211 Schmucker Science Center

West Chester University

West Chester, PA 19383

(215) 436-2318

Dr. Potvin, *Chairperson*

Dr. Fairchild and Dr. Beneski, *Coordinators for Graduate Studies*

### PROFESSORS

Carmela L. Cinquina, Ph.D., *Rutgers-The State University*

Marianne K. Eleuterio, Ph.D., *University of Delaware*

Frank Eliot Fish, Ph.D., *Michigan State University*

Ronald F. Romig, Ph.D., *University of Delaware*

Jack Waber, Ph.D., *University of Hawaii*

Richard I. Woodruff, Ph.D., *University of Pennsylvania*

### ASSOCIATE PROFESSORS

Robert W. Bernhardt, M.S., *Syracuse University*

Georgann Cullen, M.A., *Kent State University*

G. Winfield Fairchild, Ph.D., *University of Michigan*

Gustave Mbuy, Ph.D., *University of Cincinnati*

Martha A. Potvin, Ph.D., *University of Nebraska*

Elise Triano, Ph.D., *Thomas Jefferson University*

### ASSISTANT PROFESSORS

John T. Beneski Jr., Ph.D., *Washington State University*

Steven L. Broitman, Ph.D., *Princeton University*

Judith J. Greenamyre, D.V.M., *Ohio State University*

Maureen T. Knabb, Ph.D., *University of Virginia*

### MASTER OF ARTS IN BIOLOGY

#### Admission to the Program

Applicants must meet the general requirements for admis-

sion to degree study at West Chester University and must submit scores for the verbal, quantitative, and advanced biology sections of the Graduate Record Examination. In addition, applicants must have taken a minimum of two semesters of general chemistry, two semesters of organic chemistry, one semester of physics, one semester of calculus, and at least 17 semester hours of course work in the biological sciences.

DEADLINE DATES FOR APPLICATIONS: March 1 for all students wishing to be considered for graduate assistantships for the following September; August 1 for the fall semester; November 1 for the spring semester.

#### Degree Candidacy

In order to qualify for admission to degree candidacy, the student must:

1. Have completed a minimum of 15 hours of graduate courses in biology with an average of "B" (3.0) or better.
2. Have removed any provisional conditions applied at the time of admission to graduate study.
3. Have presented a thesis proposal acceptable to a committee of faculty who will be responsible for its supervision.

### DEGREE REQUIREMENTS

#### 30 Semester Hours

The candidate for the M.A. in biology must complete a minimum of 30 semester hours, of which at least 24 hours must be taken in biology. BIO 511, BIO 513, BIO 514, BIO 591, and BIO 610 are required. Six credit hours or two courses may be taken in allied departments under the advisement and with the approval of the graduate coordinator. The successful candidate must perform well in a final oral examination and thesis defense.

### COURSE DESCRIPTIONS

#### BIOLOGY

Symbols: BIO unless otherwise shown as BIL laboratory.

Numbers in parentheses at the end of course descriptions indicate the number of hours of lecture and lab, respectively. Prerequisite for graduate course attendance is admission to the degree program or permission of the graduate coordinator.

**511 Biometrics (3)** An introduction to the design and analysis of biological research. An independently conducted research project is a required part of the course. (2, 3)

**513 Research Techniques in the Biological Sciences I (3)** An introduction to the theory and application of histological techniques, and light and electron microscopy. (0, 3)

**514 Research Techniques in the Biological Sciences II (3)** Introduces students to the theory and practical application of selected techniques in biological research, such as radioisotope

labeling techniques, spectrophotometry, and various chromatographic procedures. (0, 3)

**521 Cell and Molecular Biology (4)** A lecture and laboratory course covering the molecular bases of cellular life. Eukaryotic cell structure and function will be emphasized. (3, 3)

**528 Animal Histology (3)** Structure and function of animal tissues and organs. (2, 2)

**530 Human Genetics (3)** Basic genetic theories as they apply to the study of humans, chemical basis of inheritance; biochemical variation, cytogenetics, somatic cell developmental, behavioral, and population genetics of man, immunogenetics, quantitative inheritance, treatment, and prevention of genetic disorders, relationships between viruses, genes, and cancer; social, legal, and psychological aspects of human genetics. (3, 0) PREREQ: Introductory genetics

**531 Molecular Genetics (3)** This course exposes graduate students interested in gene manipulation to up-to-date information in prokaryotic and eukaryotic genetics. Intended as a companion course to BIL 534. (3, 0)

#### BIL 534 Introduction to Recombinant DNA Methodology (3)

Laboratory techniques for gene manipulation; growing and utilizing plasmid and virus vectors; use of restriction endonucleases, analysis and recovery of DNA by electrophoresis, gene cloning in *Escherichia coli*, and site-specific mutagenesis. (0, 6) PREREQ: Microbiology, biochemistry.

#### 535-538 Course Topics in Biology (1-3)

Courses in this series are of timely interest and are not offered on a regular basis. Courses may include either lecture or laboratory instruction, and may concern a wide range of topics in biology not covered by regularly scheduled courses.

**547 Growth and Development (3)** Discussion course dealing with current topics in the field of developmental biology. (3, 0) PREREQ: Genetics and embryology recommended

**548 Animal Development (4)** Introduction to principles of animal development with laboratory study of selected vertebrate embryos. (3, 3)

**552 Comparative Parasitology (3)** Morphology and life cycles of the important parasites of man and animals; epidemiology, pathogenesis, and methods of treatment and control. (2, 3)

**554 Mycology (3)** An introductory course including a general study of the biology of fungi and a survey of the field of medical mycology. (3, 0)

**556 Virology (3)** Molecular biology of bacterial, plant, and animal viruses; virus classification, ultrastructure, mechanisms of replication, and effects of virus infection on host cells. (2, 3) PREREQ: Genetics.

**557 Functional Animal Morphology (3)** A study of the structure, form, and function of morphological adaptations in animals as examined through a mechanical, ecological, and evolutionary perspective. (3, 0)

**564 Microbial Physiology (3)** Physiology and biochemical variations are studied in the prokaryotes and lower eukaryotes. (3, 3) PREREQ: Microbiology.

**565 Immunology (4)** Immunoglobulin structure and function, nature of antigens, cell-mediated immunity, hypersensitivity, regulation of immunity, and immunological diseases. Laboratory experience in immunological techniques. (3, 3) PREREQ: Microbiology.

**566 Plant Physiology and Biochemistry (3)** Plant-cell physiology, including respiration, photosynthesis, enzyme catalysis, auxins, and membrane phenomena. (2, 3) PREREQ: College botany.

**567 Endocrinology (3)** An integrative look at the physiology of the mammalian endocrine system in the regulation and maintenance of

homeostasis. The pathology associated with hormone imbalance will be included. (3, 0) PREREQ: Cell physiology and mammalian physiology.

**568 General Animal Physiology (4)** General theoretical and applied principles of the physiology of various animal cells, tissues, and organs, with an emphasis on homeostasis and mammalian physiology. (3, 3)

**570 Population Biology (3)** A quantitative second course in ecology, emphasizing distributional patterns and fluctuations in abundance of natural populations. (2, 3) PREREQ: General ecology.

**571 Wetlands (3)** A course designed to provide practical experience in wetlands classification, delineation, regulation, management, and mitigation practices. The abiotic and biotic characteristics of inland and coastal wetlands are emphasized. (2, 3) PREREQ: Eight hours of biology or permission of instructor.

**572 Aquatic Biology (3)** An introduction to the ecology and identification of aquatic organisms, with emphasis on the biota of streams and wetlands. (2, 3)

**575 Plant Communities (3)** A survey of ecological, morphological, and physiological strategies of plants from seed through adult stages. The integration of these strategies to explain the major plant communities of North America will be covered. (2, 3) PREREQ: General biology.

**576 Limnology (3)** The measurement and analysis of the physical, chemical, and biological properties of freshwater environments, with emphasis on lake ecosystems. (2, 3)

**580 Light Microscopy and the Living Cell (3)** Theory and practical techniques of all types of light microscopy and their uses in investigating living cells. Also includes techniques such as microinjection, cell electrophysiology, and others. Strong emphasis on "hands-on" work with equipment. (2, 2)

**584 Epidemiology (3)** A general study of the epidemiology of both infectious and environmentally related health problems. Methods of interviewing and data collecting are also included. (3, 0) PREREQ: Microbiology.

**585 Systematic Botany (3)** Principles of taxonomy and biosystematics. Selected plant families from tropical and temperate zones. Each student develops a proficiency in the use of modern flora and knowledge of the common species of the spring flora of Chester County. (2, 3)

**591 Directed Research I (3)** To be taken when the student begins his/her thesis research. Includes a comprehensive literature search and development of specialized techniques. This course should culminate in the acceptance of the thesis proposal by an appropriate committee of faculty and is required for degree candidacy.

**592 Directed Research II (3)** A continuation of the research proposed and initiated in BIO 591. To be taken for credit only with the approval of the graduate coordinator.

**593 Directed Research III (3)** A continuation of the research proposed and initiated in BIO 591. To be taken for credit only with the approval of the graduate coordinator.

**610 Thesis (3)**

## Business

### Master of Business Administration Program

231 Wayne Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2608

Prof. Hamilton, *M.B.A. Director*

The Departments of Accounting, Economics, Management, and Marketing jointly offer a program leading to the Master of Business Administration (M.B.A.) with areas of concentration in Accounting; Economics Finance; General Business; Management; Management Information Systems; and Small Business Management. (NOTE: There is a temporary moratorium on the admission of new students concentrating in Accounting, Management Information Systems, and Small Business Management.) This degree program is designed for individuals of diverse academic backgrounds, provided that they have undergraduate course work or the acceptable equivalent in accounting, economics, management, marketing, and quantitative business analysis. The program consists of 27 semester hours of core courses plus nine semester hours of courses selected for their concentration.

M.B.A. classes meet in two separate formats. For the regular weekday evening program, each course meets one night per week throughout the semester.

For the Accelerated Program, classes meet every third weekend: Thursday evening, Friday afternoon and evening, and Saturday morning and afternoon. This is an intensive two-year program designed to provide increased management skills for people who already have significant professional and/or management responsibilities. Typically, these individuals are middle- and upper-level managers who want to earn an M.B.A. without interrupting their careers.

Both formats have the same course work and requirements.

- 1. Required Core** 27 semester hours
- ACC 501 Managerial Accounting and Control
  - CSC 502 Computers for Managers
  - ECO 547 Managerial Economics
  - FIN 501 Financial Management
  - MKT 501 Marketing Management
  - MGT 511 Management and Organization Theory
  - MGT 560 Business Communications
  - MGT 599 Strategic Management
  - BLA 501 Legal Environment of Business. Required for those who have not completed an acceptable undergraduate law

course; if such a course was completed, one of the following must be selected:

MGT 513 Business and Society, or  
MGT 531 Human Resources Management, or  
MGT 541 Production and Operations Management, or  
MGT 561 International Business

## 2. Area of Concentration 9 semester hours

(Note: There is a temporary moratorium on the admission of new students to this area.)

Required:

ACC 510 Current Accounting Concepts (3)  
ACC 520 Accounting Information Systems (3)  
ACC 530 Accounting Planning and Research (3)

## Economics/Finance 9 semester hours

Required:

ECO 525 Contemporary Monetary Theory and Financial Institutions (3)

ECO 530 Economics and Public Policy (3)

FIN 544 Investment Analysis and Portfolio Management (3)

## General Business 9 semester hours

Required:

Nine semester hours of specific M.B.A. courses and with prior written consent of M.B.A. director.

## Management 9 semester hours

Required:

MGT 551 Management Decision Making (3)  
MGT 521 Organizational Development (3)  
MGT 587 Special Topics in Management (3)

## Management Information Systems 9 semester hours

(Note: There is a temporary moratorium on the admission of new students to this area.)

Required:

Courses to be selected with approval of M.B.A. director from

Computer Science (CSC) course offerings. (See Mathematics and Computer Science.)

## Small Business Management 9 semester hours

(Note: There is a temporary moratorium on the admission of new students to this area.)

Required:

MGT 571 Small Business Entrepreneurship (3)

MGT 573 Management of Small Business Enterprises (3)

MGT 575 Field Studies in Small Business Management (3)

See department sections for course descriptions.

## ADMISSION

The program has independent admission criteria.

Applicants must submit: all undergraduate transcripts demonstrating high quality performance in their undergraduate degree; appropriate scores from the Graduate Management Admissions Test; an essay on career plans; a current resume; and two letters of recommendation. Registration for M.B.A. courses must be approved by the M.B.A. director.

## DEADLINE DATES FOR APPLICANTS

Applicants must submit the above information by May 1 for summer sessions; July 15 for fall semester; or November 15 for spring semester.

## DEGREE CANDIDACY

For degree candidacy approval, students must maintain a minimum cumulative Grade Point Average (GPA) of 3.0 in all M.B.A. courses and a 3.0 GPA in concentration courses, be fully matriculated, and have completed all foundation courses.

## GRADUATION REQUIREMENT

Students must maintain a minimum cumulative GPA of 3.0 in all M.B.A. courses and a 3.0 GPA in concentration courses.

# Accounting

Prof. Galbraith, *Chairperson* (215-436-2236)

## PROFESSORS

Sunion Hong, Ph.D., *New York University*

Charles H. Mott, Ph.D., *American University of Washington, D.C.*

Ali Naggat, Ph.D., *University of Oklahoma*

## ASSOCIATE PROFESSOR

Eugene C. Hassler, M.B.A., *Indiana University*

## ASSISTANT PROFESSORS

Clyde J. Galbraith, M.B.A., *Drexel University*

Carl M. Smith, M.B.A., *Temple University*

## COURSE DESCRIPTIONS

### ACCOUNTING

Symbol: ACC

**500 Financial Accounting (3)** A study of financial statements and financial accounting valuation for assets, liabilities, stockholders' equity, income, and expense. For those students admitted to M.B.A. studies without the previous course work in accounting, is equivalent to two undergraduate courses. Normally offered in summer only.

### 501 Managerial Accounting and Control (3)

A course in advanced managerial accounting, focusing on accounting methods and techniques

useful in making business decisions. Included are measurements of divisional performance, revenue and pricing decisions, product decisions, and capital budgeting. Control systems and techniques are examined from a managerial perspective. Required core course. PREREQ: ACC 500 or undergraduate equivalent.

### 510 Current Accounting Concepts (3)

Financial accounting with primary emphasis on current professional accounting principles and practices. Topics to be covered include income determination, asset valuation, and financial statement evaluation. This course will provide a bridge from theory to practice. PREREQ: ACC 501.

### 520 Accounting Information Systems (3)

Theoretical and practical aspects of the development and management of accounting information systems in businesses and other organizations. Development of a general model for use in system design and evaluation with subsequent study focusing on practical applications of the model using case studies and computer related projects. PREREQ: ACC 501.

### 530 Accounting Planning and Research (3)

Development of alternative strategies used by business management to minimize the impact and amount of income tax liability of the firm. Topics to be covered include tax planning, current tax regulations, and related complex taxation problems and issues. PREREQ: ACC 501

## Economics

Dr. Fiorentino, *Chairperson* (215-436-2134)

### PROFESSORS

Philip DeMoss, Ph.D., *Kansas State University*  
 Patrick J. M. Sylvester, Ph.D., *Bryn Mawr College*  
 Tahany Naggar, Ph.D., *University of Oklahoma*

#### COURSE DESCRIPTIONS

##### ECONOMICS

Symbol: ECO

**501 Fundamentals of Economics (3)** An introduction to the economic way of thinking, consumer behavior and business decision making, market structure and antitrust policy, energy and the environment, national income analysis, monetary and fiscal policy, economic growth, and international trade. Intended for those students with no previous course work in economics; is equivalent to two undergraduate courses. Normally offered in summer only.

**502 Fundamentals of Statistics for Business Economics (3)** Frequency distributions, random variables, probability theory and models, estimation theory, hypothesis testing, analysis of variance, regression and time-series analysis. Intended for those students with no previous course work in statistics. Normally offered in summer only.

**503 Economic Role of Women (3)** Statistics indicate that one of the most important changes in the American economy in this century is the increase in the number of working women. Job-related aspects, such as the historical pattern, labor force participation, education, earnings,

labor supply, and sex discrimination will be examined. PREREQ: ECO 501 and ECO 502

**510 Applied Econometrics (3)** Analysis of multivariate models, determination of trends, oscillation, and periodic movements. Topics include remedies for auto-correlation and multicollinearity; dummy variables; distributed lags, forecasting and simulation; and alternative estimation techniques, such as two-stage least squares, three-stage least squares, and maximum likelihood estimators. PREREQ: ECO 501 and ECO 502, or their undergraduate equivalent.

**525 Contemporary Monetary Theory and Financial Institutions (3)** This course enhances the student's capability to analyze the interrelationships between aggregate economic activity, financial markets and central banking instruments, objectives, and policy. Topics relate to demand for financial assets. PREREQ: ECO 501

**530 Economics and Public Policy (3)** The principles and methods of economic analysis are used to evaluate the American economic system. Inflation, recession, and economic growth; problems of public finance and taxation; public policy regarding the concentration of economic power. PREREQ: ECO 501.

**547 Managerial Economics (3)** Development and application of a set of advanced micro-macro economic concepts to serve both as a

source of theoretical structure and unification of other business sciences. Emphasis will be given to topics such as risk analysis, linear programming, and capital budgeting. Required core course. PREREQ: ECO 501 and ECO 502 or undergraduate equivalents.

##### FINANCE

Symbol: FIN

**501 Financial Management (3)** Theory and practice of managerial finance, with emphasis on analysis and understanding of the financial consequences of managerial decisions. Topics include financial statements, capital budgeting, working capital, and special contemporary concerns, such as small business finance. Required core course. PREREQ: ACC 500, ECO 501, and ECO 502, or undergraduate equivalent.

**544 Investment Analysis and Portfolio Management (3)** Introduction to investments, including examination of why and how individuals invest. This course provides an overview of the process by which an individual seeks out and synthesizes information about investment opportunities in order to make decisions to add to, maintain, or delete assets from an investment portfolio. Special attention is directed to the risk and return of assets. PREREQ: FIN 501.

### ASSOCIATE PROFESSORS

Roger E. Bove, Ph.D., *Harvard University*  
 Dan Mohan, Ph.D., *Rutgers University*

### ASSISTANT PROFESSORS

Cynthia D. Benzing, Ph.D., *Drexel University*  
 Kevin Dunleavy, Ph.D., *Duke University*  
 Christopher Fiorentino, Ph.D., *Temple University*

## Management

Dr. Selvanathan, *Chairperson* (215-436-2649)

### PROFESSORS

Hung M. Chu, Ph.D., *Louisiana State University*  
 David L. Paden, D.B.A., *Indiana University*

### ASSOCIATE PROFESSORS

Charles H. McGee, Ph.D., *Northwestern University*

Rani G. Selvanathan, Ph.D., *University of Delhi, University of Paris*

Roberta Snow, Ph.D., *University of Pennsylvania*

### ASSISTANT PROFESSORS

James W. Hamilton, M.B.A., *Northeastern University*  
 Anne P. Murphy, M.B.A., *University of Pennsylvania*

#### MANAGEMENT

Symbol: MGT (NOTE: The Majority of MGT courses have been renumbered.)

**500 Fundamentals of Management (3)** This course provides the conceptual foundation in management theory, principles, and practices for the more advanced courses required for the M.B.A. Intended for those students with no previous course work in management. Normally offered in summer only.

**511 (previously 501) Management and Organization Theory (3)** An examination of

management functions and managerial processes from a systems perspective. This course traces the evolution and development of management and organization principles and theories, with emphasis on the development of a framework for analysis of managerial problems and opportunities in both private and public sectors. The relationship between the individual and the organization, and topics such as leadership, communications, motivation, and decision making will be explored. Successful mastery of topics covered in a traditional principles of management course will be

assumed. Required core course. PREREQ: MGT 500 or undergraduate equivalent.

**513 (previously 506) Business and Society (3)** The context and environment in which business organizations operate with specific attention to the social, ethical, political, and legal dimensions of an organization's external environment. Value assumptions, means-ends relationships, and policy ramifications of the constraints and opportunities inherent in the environment will be examined in depth. A managerial perspective will be developed to build a framework for macro-level trade-offs

among and between competing economic, social, ethical, political, and legal forces and goals. Students must master all foundation areas prior to admission to this course.

**521 (previously 509) Organizational Development (3)** Interpersonal relations, intra- and intergroup relations, and the leadership role and function in the management of organizational development, change, conflict, and productivity. Primary focus will be on organizational development as an intervention strategy aimed at changing and improving organizational climate and performance. Organizations will be viewed as sociotechnical systems interacting with both internal and environmental forces. PREREQ: MGT 511

**531 (previously 504) Human Resources Management (3)** The managerial implications of the human resources management and personnel administration functions. Topics include forecasting and planning of staffing requirements, recruitment, selection, allocation, evaluation, and development of the human resources of an organization. Lectures, class discussions, and case materials will be used. PREREQ: MGT 500 or undergraduate equivalent

**541 (previously 505) Production and Operations Management (3)** Effective formulation and solution of problems in the acquisition of productive resources by the firm, their configuration into a productive system, and their utilization in producing goods and services. This course focuses on operational rather than strategic aspects, using quantitative techniques in the areas of demand forecasting, production and capacity planning, transportation facilities layout and job design, inventory control, quality control, waiting line problems, and scheduling. Students must master all foundation areas prior to admission to this course.

**551 (previously 508) Managerial Decision Making (3)** The course provides technical enrichment, including an exposure of various types of decision-making techniques for a prospective specialist in decision science. Situations examined will include distribution, resource allocation, project scheduling,

congestion in service system, decision support systems, and artificial intelligence. PREREQ: MGT 511

**560 (previously 502) Business Communications (3)** The theory and practice of effective personal and organizational communications, development of managerial skills in verbal and written communications for a variety of media and forums; and practical experience in the delivery of management-oriented oral presentations and written papers. Particular attention will be paid to identifying and overcoming barriers to effective communication and insight. Required core course.

**561 (previously 507) International Business (3)** Examination of the problems of management, marketing, and finance when developing and engaging in international business. Attention to the formulation of alternative strategies for developing international business enterprises, the impact and consequences of implementing various alternative strategies for traditional business functions, problems of the multinational firm, and the special challenges of doing business with or in underdeveloped countries. PREREQ: MGT 511 and MKT 501

**571 (previously 511) Small Business Entrepreneurship (3)** An interdisciplinary course on starting and managing a small business. Topics include the role of entrepreneurship in our economy and society, identifying and exploring opportunities, feasibility studies, legal structure, raising venture capital, and organization structure. Case studies and outside speakers will be used extensively. PREREQ: MGT 511.

**573 (previously 512) Management of Small Business Enterprises (3)** The operation of an on-going small business enterprise. Topics include forecasting, budgeting, inventory control, pricing, promotion, and record keeping. The roots of failure and success of small business enterprises will be examined. Selected guest speakers will share their views and experiences with students on pertinent topics. Cases and outside readings will be used to broaden students' exposure to small business management issues. PREREQ: MGT 511.

**575 (previously 513) Field Studies in Small Business Management (3)** This course provides students with the opportunity to work on a consulting project for a small business firm. Teams of two to four students are assigned to each small business client requesting management counseling. Depending on expertise and past experience, the teams will work on interdisciplinary projects involving market research, budgeting, record keeping systems, pricing, and promotion. This course is sponsored by the West Chester University Small Business Institute. PREREQ: MGT 571 and 573

**587 (previously 510) Special Topics in Management (3)** A seminar or independent study course providing exposure to current literature and discourse on selected issues in management. Includes an individual research project treating a complex management issue from an interdisciplinary, policy-level perspective. Parallel seminar discussions with peers, the instructor, and with outside experts will provide a sounding board for hypotheses formulation and testing. Extensive exposure to professional journals will be required in order to enhance familiarity with contemporary advances in theory and practice. PREREQ: Completion of three or more core courses.

**599 (previously 503/598) Strategic Management (3)** An in-depth examination of the processes by which business strategies are conceived, formulated, executed, and changed. Specific topics include strategic planning, endogenous and exogenous influences affecting strategic feasibility, analyses, and choices. Comprehensive strategy-oriented cases from a variety of business contexts are used. Should be taken in student's final semester. Required core course. PREREQ: M.B.A. Core.

## MANAGEMENT INFORMATION SYSTEMS

Symbol: MIS

**500 Business Information Systems (3)** A blending of theory, case studies, and personal computer applications to the solution of business information problems. Students will gain insight into functional and strategic implications of information resources, technology, and systems

## Marketing

Dr. Ballas, *Chairperson* (215-436-2363)

### PROFESSORS

Angelos C. Ballas, Ph.D., *New School for Social Research*

Andrew W. Green, Ph.D., *University of Pennsylvania*

### COURSE DESCRIPTIONS

#### LAW

Symbol: BLA

**501 Legal Environment of Business (3)** An in-depth examination of legal issues for business organizations, including constraints and opportunities. Primary attention will be given to an intensive exploration of the law as it affects business contracts, sales, commercial paper, and the formation and operation of a business entity from the perspective of the manager. This course is designed to meet the

professional needs of managers who have minimal exposure to the law and to enhance their knowledge of the legal ramifications of business operations

#### MARKETING

Symbol: MKT

**500 Principles of Marketing (3)** An introduction to marketing. Selection of target markets, developing marketing mixes, decision making, planning, implementation, and monitoring of marketing programs. Intended for students with

no previous course work in marketing. Normally offered in summer only.

**501 Marketing Management (3)** An analytical approach to the study of marketing, focusing on the total environment in which marketing decisions are made. Emphasis is on planning the marketing effort and integrating it into the total operation of an organization, i.e., managing the marketing function. Familiarity with topics covered in a traditional principles of marketing course will be assumed. Required core course. PREREQ: MKT 500 or undergraduate equivalent

### ASSOCIATE PROFESSOR

John R. Morgan, Ph.D., *Temple University*



## Chemistry

Room 154 Schmucker Science Center II

West Chester University

West Chester, PA 19383

(215) 436-2631

Dr. Moran, *Chairperson*

Dr. Fenton and Dr. Ghoroghchian, *Coordinators of Graduate Studies*

### PROFESSORS

Marc L. Durand, Ph.D., *University of New Hampshire*

John Fenton, Ph.D., *University of Minnesota*

Andrew Goudy, Ph.D., *University of Pittsburgh*

Virgil E. Magnuson, Ph.D., *University of New Hampshire*

John Mangravite, Ph.D., *University of New Hampshire*

Michael Moran, Ph.D., *University of Pennsylvania*

Philip B. Rudnick, Ph.D., *Rutgers — The State University*

William Torop, Ed.D., *University of Pennsylvania*

### ASSOCIATE PROFESSORS

Helen G. Reid, Ph.D., *University of New Orleans*

Philip Witonsky, Ph.D., *University of Minnesota*

### ASSISTANT PROFESSORS

Naseer Ahmad, Ph.D., *Aligarh University*

Roger Barth, Ph.D., *Johns Hopkins University*

Melissa Cichowicz, Ph.D., *University of Maryland*

Blaise Frost, Ph.D., *University of South Dakota*

Jamal Ghoroghchian, Ph.D., *University of Southampton*

Joel Ressler, Ph.D., *Lehigh University*

The Department of Chemistry offers a program leading to the Master of Science in chemistry and a Master of Science in clinical chemistry. It also cooperates with the Departments of Geology and Astronomy and Physics in offering a program leading to the Master of Arts in physical science. (See a description of the Physical Science program.)

### MASTER OF SCIENCE IN CHEMISTRY

#### Admission Requirements

In addition to meeting the general requirements for a degree program at West Chester, applicants must present an undergraduate background that includes mathematics through calculus, one semester of analytical chemistry, and full-year courses in organic chemistry and physical chemistry.

#### Degree Requirements

1. Before admission to degree candidacy, each student is required to pass three qualifying examinations in the five major areas of chemistry (inorganic, analytical, physical, organic, and biochemistry). The student may select up to four areas. If necessary, the examinations in each area may be retaken once. The student may be required to enroll in appropriate undergraduate courses for no credit in order to prepare for a re-examination. These examinations must be passed before admission to degree candidacy, i.e., prior to the attainment of 15 graduate credits.
2. At the discretion of the department chairperson, Graduate Record Examination scores may be required for purposes of evaluation and guidance.

3. Reading proficiency is required in any one of the following modern languages: German, French, or Russian. The reading test is administered by the Department of Foreign Languages. In place of the modern-language proficiency, a demonstrated proficiency in a computer language (FORTRAN, for example) may be substituted.\*
4. The candidate must perform successfully on an oral examination, which is required for Options A, B, and C listed below. The oral examination will include general chemistry knowledge but will place emphasis on the area represented by independent study or the research report. The members of the examination committee include the research supervisor, the departmental graduate coordinator, and two other professors.

#### Program for the Master of Science in Chemistry

The M.S. in chemistry program consists of a required core of 15 semester hours and a chemistry elective area for which there are three options. (See the description of each option for how many total semester hours are required.) All students must complete the core, composed of CHE 511, 531, 540, or 543 and any two of the topics courses (CHE 515, 525, 533, 544, 551, or 575). One semester of CHE 591 must be taken.

#### Option A (30 semester hours)

This is the thesis program. Beyond the core, the candidate takes Independent Study/Thesis Research (CHE 610) for six credits and nine semester hours of electives.

#### Option B (33 semester hours)

Beyond the core, this option requires Independent Study (CHE 610) for six credits and 12 semester hours of electives.

#### Option C (36 semester hours)

Under this plan, the student completes core requirements and an elective area of 21 semester hours that must include three credits in Independent Study (CHE 610).

Under all options, the elective area is developed under advisement from chemistry offerings but may include three semester hours from another science area or from mathematical sciences.\* Until admitted to degree candidacy, students may not undertake independent study.

### MASTER OF SCIENCE IN CLINICAL CHEMISTRY

#### Admission Requirements

An applicant must meet the general requirements for a degree program at West Chester and must hold a bachelor's degree in chemistry, medical technology, or a closely related field.

Course prerequisites for admission include one semester each of analytical chemistry, biochemistry, physics, clinical chemistry, clinical chemistry laboratory, and physical chemistry. Two semesters of organic chemistry and mathematics through calculus are also required. Several of the above courses may be waived if the applicant has graduated from a four-year medical technology program approved by the National Accrediting Agency in the Clinical Laboratory Sciences (NAACLS). Students who do not meet program prerequisites may take required courses upon enrollment. Graduate Record Examination scores may be required prior to acceptance.

#### Degree Requirements

1. Before admission to candidacy, each student must pass a comprehensive examination covering the areas of biochemistry, clinical chemistry, and analytical chemistry. This examination is usually administered after one-half of the student's course work

\*A computer science course taken to satisfy the foreign language requirement will not be counted as an elective toward the degree



is completed. If necessary, this examination may be retaken once.

- The candidate must perform successfully on an oral examination, which is required for all program options. The oral examination will include general chemistry knowledge but will place emphasis on the area represented by independent study or the research report. The members of the examination committee include the research supervisor, the departmental graduate coordinator, and two other professors.

#### Program for the Master of Science in Clinical Chemistry

The program consists of a required core of 20 semester hours. Additional credits needed for the degree may be pursued under three options.

Core courses: CHE 524, 548, 555, 579, 582, 583, ADM 505 (CHE 550, Clinical Chemistry Internship, is also required of students who lack previous clinical laboratory training.)

#### Option A (36 semester hours)

Core, plus CHE 610 (Advanced Independent Study/Thesis Research), plus 13 semester hours of electives from chemistry, biology, physics, mathematics, computer science, or administration.

#### Option B (30 semester hours)

Core, plus four semester hours of electives, plus six credits of research/thesis (CHE 610).

#### Option C — Master of Science in Clinical Chemistry and Certificate in Administration (38 semester hours)

Chemistry core, plus three semester hours of CHE 610, plus core from the graduate administration program. The student minors in administration and receives the M.S. degree, in addition to the Certificate in Administration.

### MASTER OF EDUCATION IN CHEMISTRY

#### Admission Requirements

In addition to meeting the general requirements for admission to a

degree program at West Chester, applicants must present an undergraduate background, including mathematics through calculus and 24 semester hours of undergraduate chemistry.

At the discretion of the department chairperson, Graduate Record Examination scores may be required for evaluation and guidance.

#### Degree Requirements

- If academic or professional performance is less than satisfactory during the precandidacy period, the student may be required to enroll in an appropriate undergraduate course.
- Successful performance on a comprehensive oral examination given upon completion of the program.
- Successful completion of the program outlined below.

#### Program for the Master of Education in Chemistry

(34 semester hours)

The M.Ed. in chemistry program consists of professional education requirements and area concentration requirements as outlined below.

**Professional Education Requirements** 10-12 semester hours  
(See page 42)

**Area of Concentration** 20-22 semester hours

A. Required 14 semester hours

SCE 500 Modern Trends in Science Education (2)

CHE 511 Advanced Inorganic Chemistry I (3)

CHE 524 Analytical Chemistry II (3)

CHE 531 Organic Reaction Mechanisms (3)

CHE 540 Chemical Thermodynamics (3)

(CHE 543 may be taken in place of CHE 540)

B. Electives, under advisement (6-8)

**Electives (Professional or Academic) (0-4)**

### COURSE DESCRIPTIONS CHEMISTRY

Symbol: CHE unless otherwise shown. CRL indicates laboratory.

**500 Fundamentals of Radioisotope Techniques (3)** Biological, chemical, environmental, and physical effects of nuclear radiation. Radiation detection, instrumentation, and radiotracer methodology. PREREQ: One year of college chemistry and one year of college physics.

**503 Chemistry of the Environment (3)** The chemistry of the atmosphere, hydrosphere, and biosphere. Man's impact on these areas. (Not for M.S. in chemistry.)

◆ **505 Fundamental Topics in Chemistry (2-6)** Basic level elective courses in chemistry for professional growth. (Not for M.S. in chemistry.) PREREQ: General chemistry.

**508 Industrial Pollution (3)** Applications of elementary chemical engineering to the industrial complexities of the environmental processes. Emphasis on unit operations and unit processes applicable to pollution control and abatement.

**509 Descriptive Inorganic Chemistry (3)** The emphasis of this course is on periodic properties of the representative elements, the structure of inorganic solids, the chemistry of aqueous and nonaqueous solutions, and the study of some transition metals. Lanthanides and actinides are

◆ This course may be taken again for credit

also studied. (Not for M.S. in chemistry.) PREREQ: CHE 103/104.

**511 Advanced Inorganic Chemistry I (3)** Structure and properties of the elements and their compounds from a theoretical point of view; the periodic law, acids and bases, structure and reactivity of metal compounds and maingroup compounds. PREREQ: CHE 341.

◆ **515 Topics in Inorganic Chemistry (3)** Topics of current interest in inorganic chemistry. Topic to be announced prior to registration.

**516 Inorganic Preparations (3)** A laboratory course in advanced techniques for the synthesis of inorganic compounds.

**517 History of Chemistry (1)** The history of chemistry and its predecessors from ancient times to the present.

**518 Literature of Chemistry (1)** Instruction in the use of a modern chemical library, reference and data acquisition, synthetic procedures and computer data bases. PREREQ: CHE 231.

**519 Ethics and Human Values in Science (1)** A one-semester course for science majors to acquaint students with potential ethical problems in their professional careers.

**524 Analytical Chemistry II (3)** Basic principles of applied instrumental analysis. Special emphasis on the use of spectrophotometric, electroanalytical, and chromatographic instrumentation. PREREQ: CHE 321 and CHE 341.

#### CRL 524 Analytical Chemistry II Laboratory

(2) Practical experience in the choice and application of instrumental methods to chemical systems. CONCURRENT OR PREREQ: CHE 524.

◆ **525 Topics in Analytical Chemistry (3)** In depth examination of current topics in instrumental or wet chemical analysis. Special emphasis on state-of-the-art development and applications.

**CRL 527 Electron Microscopy I (3)** (See ESL 527.)

**CRL 529 Electron Microscopy II (3)** (See ESL 529.)

**531 Organic Reaction Mechanisms (3)** Theoretical treatment of selected organic reactions. Emphasis on bonding theory, structural relationship, equilibria, and free-energy relationships.

**532 Synthetic Organic Chemistry (3)** Topics of current interest in synthetic organic chemistry. Topic announced prior to registration.

◆ **533 Topics in Organic Chemistry (3)** Topics of current interest in organic chemistry. Topic announced prior to registration.

**535 Qualitative Organic Analysis (5)** Identification of pure organic compounds and mixtures of organic compounds using classical and modern instrumental techniques. Laboratory included.

**536 Polymer Chemistry (3)** Polymerization

kinetics, rheology of polymer melts, crystallization parameters, and monomer reactivity in copolymerization.

**CRL 536 Polymer Chemistry Laboratory (2)**

A course designed to introduce the advanced student to the synthesis of polymers and the study of the molecular, physical, and thermal properties of these compounds. PREREQ: CHE 232/CRL 232. COREQ: CHE 536.

**540 Chemical Thermodynamics (3)** Laws and functions of thermodynamics and their applications: introduction to statistical thermodynamics.

**543 Quantum Chemistry (3)** Basic quantum chemistry, including the hydrogen atom problem, chemical bonding, spectroscopic concepts, and group theory.

◆**544 Topics in Physical Chemistry (3)**

Topics of current interest in physical chemistry. Topic announced prior to registration.

**548 Clinical Biochemistry (3)** A one-semester course on the biochemical basis of disease. Case histories are discussed with emphasis on the clinical interpretation of laboratory data. PREREQ: CHE 581.

**550 Internship in Chemistry (3-6)** A full- or part-time work study appointment in a hospital, commercial, governmental, or industrial laboratory supervised jointly by an on-site supervisor and a chemistry department faculty member. PREREQ: Permission of the department internship committee

**551 Chemistry of Coordination Compounds (3)** Principles of complex formation; application of the crystal theory, various complexing agents, and chemical implications of coordinated compounds. PREREQ: CHE 511.

**555 Quantitative Clinical Methods (3)** A course on the mathematical aspects of clinical laboratory science. Statistics and laboratory uses for computers are stressed. PREREQ: CHE 581

**563 Electrochemistry (3)** Principles of electrochemical systems and galvanic cells; electrolytic applications in instrumentation and research. PREREQ: CHE 511.

**571 Fundamentals of Biochemistry (3)**

Structure and chemistry of proteins and nucleic acids; molecular biology, physio-chemical methods for biomacromolecules, enzymes, and the molecular basis for some physiological phenomena. Lab: CRL 571. PREREQ: Physical chemistry.

**CRL 571 Experimental Biochemistry (2)**

Laboratory exercises in the fundamentals of biochemistry. CONCURRENT OR PREREQ: CHE 571.

**575 Topics in Biochemistry (3)** Topics of current interest in biochemistry. Topic announced prior to registration.

**579 Chemical Toxicology (3)** A one-semester course in the basic principles of toxicological analysis. Special emphasis will be placed on documentation, sampling, and verification of laboratory materials and results. The environmental and physiological aspects of chemical toxicity will be explored.

**CRL 579 Chemical Toxicology Laboratory (2)**

A one-semester course in the basic principles of toxicological analysis. CONCURRENT OR PREREQ: CHE 579.

◆**580 Introduction to Chemical Research (2-6)** An introduction to the methodology and techniques involved in carrying out independent chemical research.

**581 Clinical Chemistry (3)** Analysis of biological fluids. Clinical significance of enzyme, electrolyte, protein, and carbohydrate analysis. Requires permission of instructor or undergraduate preparation in organic chemistry and quantitative analysis. CONCURRENT OR PREREQ: CHE 571

**CRL 581 Clinical Chemistry Laboratory (2)**

Lab for CHE 581. Practical experience in analysis of biological fluids for diagnostic parameters. Nature of biological sampling, sample preservation, methodology, statistics, and quality control. PREREQ: CRL 231 and CRL 321, or equivalents.

**582 Advanced Clinical Chemistry (3)** A one-semester course with emphasis on recent advances in testing modalities, instrumentation, and methodologies in clinical chemistry. PREREQ: CHE 571 and 581.

**583 Clinical Chemistry Seminar (2)** A course emphasizing the recent literature in clinical chemistry. Student lecture presentations and round table discussions are used. PREREQ: CHE 581.

**585 Theory and Practice of Spectrophotometry (4)** Lecture and laboratory course with emphasis on research uses of spectrophotometry. Theoretical background and laboratory techniques for understanding and carrying out advanced spectroscopic studies.

**591 Seminar (2)** Topics of current interest in chemistry.

◆**610 Advanced Independent Study/Thesis Research (3-6)**

**SCC 570 Science and Human Values (3)** Not for M.S. in chemistry.

**Any of the following dual level courses (but not more than six semester hours of credit) may be taken for graduate credit toward the degree:**

**CHE 504 Foundation of Nutrition (3)** (Not for M.S. in chemistry. See CHE 404.)

**CHE 524 Analytical Chemistry II (3)**

◆ This course may be taken again for credit.

## Childhood Studies and Reading

105C Recitation Hall

(215) 436-2944

Dr. Szabo, *Chairperson*

Dr. Christensen, *Assistant Chairperson, Graduate Programs*

### PROFESSORS

Nona E. Chern, Ed.D., *Temple University*

K. Eleanor Christensen, Ph.D., *University of Delaware*

Patricia E. Grasty-Gaines, Ed.D., *Temple University*

Joseph C. Hall, Ed.D., *Temple University*

Joan Hasselquist, Ed.D., *Temple University*

Mary A. Keetz, Ph.D., *University of Pennsylvania*

George W. Maxim, Ph.D., *Pennsylvania State University*

Erminio J. Peta, Ed.D., *Lehigh University*

Ruth B. Petkofsky, Ed.D., *Temple University*

Carol A. Radich, Ph.D., *University of Maryland*

Carlos R. Ziegler, Ed.D., *Temple University*

### ASSOCIATE PROFESSORS

A. Scott Dunlap, M. Div., *Eastern Baptist Theological Seminary*

James E. Habecker, Ed.D., *University of Pennsylvania*

Robert J. Szabo, Ed.D., *Lehigh University*

Connie Zimmerman, Ed.D., *Lehigh University*

The Department of Childhood Studies and Reading offers graduate programs in the following areas: certification in elementary education; certification as a reading specialist; a Master of Education in elementary education; a Master of Education in reading; and a Certificate of Advanced Graduate Study. Courses are available to teachers desiring permanent Pennsylvania elementary certification.

On June 1, 1987, the Pennsylvania State Board of Education implemented revisions to the Pennsylvania School Code. These revisions require all students who apply for Pennsylvania teaching certificates to pass state competency tests in

basic skills, general knowledge, professional knowledge, and specific knowledge of the subjects in which they seek teacher certification.

**As changes are made in requirements for elementary certification and reading specialist certification, it is the student's responsibility to meet those changes.**

After the student's application has been submitted to WCU's

Office of Graduate Studies and Sponsored Research and appropriate transcripts have been received, the student will be asked to attend an initial interview with a professor from the department. No students are accepted into the graduate programs offered by the Department of Childhood Studies and Reading without initial interviews. Students are invited by letter to schedule interviews after their applications are sent by the Graduate Office to the department.

## Elementary Education

Through programs in elementary education, the department offers the Master of Education degree in elementary education, as well as nondegree programs for teachers seeking professional growth and/or credit certification.

### ADMISSION TO THE DEGREE PROGRAM

1. Applicants are expected to have an undergraduate degree from an accredited college or university. In addition, they must meet an undergraduate grade point average entry requirement of 2.8 on a scale of 4.0.

Students with a minimum grade point average of 2.5, who do not have the required undergraduate grade point average of 2.8, may receive provisional status and the opportunity to demonstrate academic ability by being granted permission to take three graduate courses and maintaining a grade point average of 3.0 or better.

The provisional student must take

EDF 501 Methods and Materials of Research for Elementary Education

and two additional courses from the following list:

EDE 522 Teaching the Communication Skills

EDE 530 Social Studies in the Elementary School

EDE 543 Creative Expression in the Elementary School

EDE 551 Child Development and Behavior

EDR 510 Foundation of Reading Instruction: K-12

2. Within the precandidacy period (the first 12-15 semester hours), the applicant must:
  - a. Complete EDF 501 and two EDE courses.
  - b. Maintain a cumulative grade point average of 2.8 overall and 3.0 in the major discipline and in elementary education courses.

Please refer also to "Degree Candidacy and Degree Requirements" under Academic Information. Students who fail to qualify as degree candidates are classified as nondegree students but may reapply for degree candidacy.

### DEGREE PROGRAM REQUIREMENTS

1. Satisfactory completion of the curriculum as given below. Both the selection and the sequence of courses should be determined in consultation with the appointed advisor. Only *six credits* of workshops are permitted.
2. A cumulative grade point average of at least 2.75 and a grade point average of at least 3.0 in the major discipline and in elementary education courses. (NOTE: All courses specific to elementary education are included in computing the grade point average in elementary education. Examples of such courses are ENG 592 and MTE 554.)
3. Satisfactory performance on the comprehensive examination.
4. Students should have elementary education certification before completing the master's degree; however, certification requirements may be waived under advisement on an individual basis

### THE COMPREHENSIVE EXAMINATION

In order to become eligible for this examination, the student must:

1. Be a degree candidate.
2. Complete at least 28 semester hours, including all required courses, by the end of the semester preceding the examination.
3. Maintain an average of 2.75 overall and 3.0 in elementary education.

The examination is given on the first Saturday in February and the second Saturday in July, unless otherwise announced by the department.

Applications for admission to the comprehensive examination are available from the department and must be filed by December 1 for the February examination and May 1 for the July examination. A candidate who fails the comprehensive examination is permitted to take one re-examination within a two-year period. Failure of the re-examination will result in a comprehensive review of the student's graduate record, followed by a determination of the candidate's future status by the departmental graduate committee.

### MASTER OF EDUCATION PROGRAM IN ELEMENTARY EDUCATION

This may consist of either a nonthesis program requiring 34 semester hours, or a thesis program requiring 30 semester hours.

In either option, the candidate must meet a professional education requirement, including EDF 501, EDF 510 or EDF 589, and EDP 550. Also required in either option is an elementary education area consisting of EDE 548, 549, 553, and an elective in reading or elementary education.

During the first session of enrollment, the student confers with an assigned advisor to determine an appropriate and desirable area of concentration. The remainder of the program will be developed within the selected concentration. The choice of concentrations may be made from areas offered by the Department of Childhood Studies and Reading or areas offered by other departments.

### MASTER OF EDUCATION IN ELEMENTARY EDUCATION

Nonthesis Program (34 semester hours)

#### I. Professional Education

9 semester hours

EDF 501 Methods and Materials of Research  
for Elementary Education (3)

EDF 510 Educational Foundations (3) *or*

EDF 589 Sociological Foundations of Education (3)

EDP 550 Advanced Educational Psychology (3)

#### II. Elementary Education

12 semester hours

EDE 548 Curriculum Theory and Trends in Elementary  
Education (3)

EDE 549 Theory and Trends in the Language Arts (3)

EDE 553 Child Development and Behavior II (3)

(These three courses should be taken after completion of 15  
hours of course work.)

Elective in Reading and/or Elementary Education (3)

**III. Area of Concentration**

12 semester hours

The 21 credit hours above are required of all degree candidates. The remaining 12 credits are to be concentrated in one of the following areas, to be selected under advisement during the first session of enrollment:

Courses offered within the department. Advising by assigned advisor.

Creative Teaching-Learning	Human Development
Early Childhood Education	Language Arts
Elementary Education (General)	Reading
Gifted and Talented	Social Studies

**Reading**

Through its graduate reading program, the School of Education offers the Master of Education degree with a major in reading, and Reading Specialist Certification. Students who complete either program are recommended for Pennsylvania certification as reading specialists. These programs prepare candidates to serve in special reading positions and as classroom teachers of reading in elementary or secondary schools.

**ADMISSION TO THE DEGREE PROGRAM**

1. Applicants are expected to have an undergraduate degree from an accredited college or university. In addition, they must meet an undergraduate grade point average entry requirement of 2.8 on a scale of 4.0.

Students with a minimum grade point average of 2.5, who do not have the required undergraduate grade point average of 2.8, may receive provisional status and the opportunity to demonstrate academic ability by being granted permission to take three graduate courses and maintain a grade point average of 3.0 or better.

The provisional student must take both:

EDF 500 Methods and Materials of Research in Education  
EDR 510 Foundation of Reading Instruction: K-12  
and one of the following courses:  
EDR 514 Reading in the Content Areas  
EDR 516 Reading Disabilities

2. The student must possess an Instructional I Certificate.
3. Courses required within the pre-candidacy period are EDR 510, 514, 516, EDF 500, and one additional course from the prescribed program.
4. Students must maintain an overall grade point average of 2.8 and a minimum of 3.0 in reading courses during the pre-candidacy period.

**DEGREE PROGRAM REQUIREMENTS**

In addition to meeting degree requirements of the University, the candidate must:

1. Successfully complete the reading curriculum and any additional courses that may be required by the reading faculty. Workshops will not be accepted to satisfy this requirement.
2. Achieve an overall grade point average of at least 2.75 and a minimum of 3.0 in reading courses.
3. Perform satisfactorily on the comprehensive examination in reading. Students are responsible for meeting all requirements by the specified time.

**THE COMPREHENSIVE EXAMINATION**

Students are eligible for the comprehensive examination when they have completed all prescribed work and been recommended by the advisor. The examination is given the first Saturday in February and the second Saturday in July. Application for the

Courses offered in other departments. Advisement for area of concentration by selected faculty in respective department.

Bilingual Education	Science
Children's Literature	Special Education
Mathematics	Writing

**Thesis Program (30 semester hours)**

Students who wish to pursue the thesis program must consult with the department chairperson, or his or her designee, not later than the second session of enrollment.

examination must be made in writing to the graduate coordinator for the February examination by December 1, and by May 1 for the July examination.

Candidates who fail the comprehensive examination are permitted one re-examination within a two-year period. Candidates who fail the re-examination are dropped from the degree program.

**MASTER OF EDUCATION IN READING (36 semester hours)****I. Professional Education Requirements 6 semester hours**

EDF 500 Methods and Materials of Research (3) *or*  
EDF 501 Methods and Materials of Research for Elementary Education (3)

Plus:

EDF 510 Educational Foundations (3)

**II. Reading Education Requirements 27 semester hours**

EDR 510 Foundations of Reading Instruction: K-12 (3)  
EDR 514 Reading in the Content Areas (3)  
EDR 515 Teaching Reading with Children's and Adolescents' Literature (3)  
EDR 516 Reading Disabilities (3)  
EDR 517 Current Practices in Teaching Developmental and Corrective Reading (3)  
EDR 519 Teaching Reading to Culturally Diverse Students (3)  
EDR 521 Reading Clinic Practicum and Seminar I (3)  
EDR 522 Reading Clinic Practicum and Seminar II (3)  
EDR 541 Organization and Operation of Reading Programs: K-12 (3)

**III. Area of Electives 3 semester hours**

Selected, under advisement, from:

EDR 523, 526, 540, 542  
EDE 522, 543, 548, 549, 551, 553, 554, 555, 560  
EDA 571

All students *must* complete a course in child and adolescent development. Any student who enters the program without having completed such a course at the undergraduate or graduate level should take EDE 551 as an elective.

**READING SPECIALIST CERTIFICATION (30 semester hours)**

Requirements for the Certification Program:

1. The student must possess an Instructional I Certificate.
2. Courses required within the first 15 hours are EDR 510, 514, 516, and 517.
3. The student must maintain an overall average of 2.75 and a minimum of 2.85 in reading courses.
4. In order to obtain the certificate, the student must successfully complete the Master of Education in reading program, except that the student is not required to take the two courses in professional education. Workshops will not be accepted to satisfy this requirement.
5. The student must perform successfully on the competency examination.

## Certificate of Advanced Graduate Study (CAGS)

The Certificate of Advanced Graduate Study (CAGS) is designed for students who already possess a master's degree and who want to expand their knowledge in a given area, or to broaden it to include other areas. Such students normally do not wish to undertake a doctoral program but, at the same time, prefer the guidance and structure offered by a program such as the CAGS.

### ADMISSION REQUIREMENTS

A student who wishes to pursue the CAGS must:

1. Possess a master's degree from an accredited institution.
2. Have attained a minimum Grade Point Average (GPA) of 3.0 in a master's degree program.
3. Present three professional letters of recommendation.

Acceptance for study toward the CAGS will be determined by the faculty of the Department of Childhood Studies and Reading. However, prior to formal admission to the program, the student is required to develop a proposed plan of study with the supervising committee (consisting of the major advisor and one additional member) that has been appointed by the department chairperson or a designee.

### PROGRAM

A minimum of 30 semester hours earned beyond the master's degree is required. Students accepted into the program will pursue a plan of study to meet their individual needs. Plans will be developed with the major advisor and be approved by the student's supervising committee. Previous course work taken will be considered in the development of the student's program. Also,

the suggested program will be presented to the departmental graduate committee for approval. Course work may be arranged as follows:

- |   |                      |
|---|----------------------|
| 1. Area of Specialization   | 18-24 semester hours |
| (Examples: Early Childhood Education, Elementary Education—General, Language Arts, Mathematics, Reading, Science, Social Studies, Gifted Education) |                      |
| Programs will be individually tailored for each student by an advisor.  |                      |
| 2. Course Work in Complementary Areas   | 0-6 semester hours   |
| 3. Seminar in Research  | 3 semester hours     |
| 4. Research Report  | 3 semester hours     |

### TRANSFER CREDITS

A maximum of six hours of approved transfer credit earned after the master's degree may be applied to the proposed program if the courses complement the area of specialization, and if the credits were earned within a period of three years before entering this program.

### CERTIFICATE OF APPROVAL

Successful completion of the program requires that the student.

1. Achieves a minimum GPA of 3.25 in all course work in the area of specialization and a minimum GPA of 3.0 in all course work taken outside the School of Education.
2. Successfully passes an oral examination in the area of specialization, as well as completes a research report. All requirements, including the research report must be completed before the, student will be allowed to take the oral examination.
3. Meets all program requirements.
4. Completes the program within six years following the date of the first enrollment.

## COURSE DESCRIPTIONS EARLY CHILDHOOD AND ELEMENTARY EDUCATION

Symbol: EDE

### 502 Introduction to Early Childhood Education (3)

A basic course in early childhood education. Emphasis is on the historical and theoretical bases influencing education of young children

### 503 Contemporary Influences in Early Childhood Education (3)

Current factors that affect the educational needs of young children and classroom practices reflecting those influences.

### 504 Early Childhood Programs (3)

Model programs in early childhood education, focusing on curriculum design and implementation in the preschool and primary years.

### 505 Seminar in Early Childhood Education (3)

Selected problems in early childhood education. PREREQ: Permission of instructor

### 506 Infant and Toddler Development and Environment (3)

Physical, social, emotional, and intellectual development of the child newborn to two years is studied. The use of developmental tests for the diagnosis of infant and toddler needs is related to the structuring of an appropriate learning environment

### 507 Preschooling Learning Environment (3)

Methods and materials, developmentally appropriate for children 2-5, are presented.

Readiness assessments, curricular discussions, and teaching approaches are addressed across the full spectrum of child development

### 522 Teaching the Communication Skills (3)

Strategies for teaching the language arts. Methods, materials, and resources for organizing creative programs in school settings.

### 530 Social Studies in Elementary Education (3)

Interdisciplinary and multicultural strategies for developing concepts, skills, and values in the social studies program.

### 532 Curriculum and Research in Social Studies (3)

Recent research in social studies, with emphasis on the theoretical bases for making curriculum decisions. PREREQ: Permission of instructor

### 533 Seminar in Social Studies Education (3)

Selected problems in social studies education. PREREQ: Permission of instructor.

### 543 Creative Expression in the Elementary School (3)

Theories and techniques to promote creative thinking and enhance children's creative potential in all areas of the school curriculum.

### 548 Curriculum Theory and Trends in Elementary Education (3)

Theoretical frameworks of elementary school curricula, curriculum development and change. To be taken after 15 hours of work

### 549 Theory and Trends in the Language Arts (3)

Analysis and evaluation of language arts

programs, including reading in the modern elementary school. PREREQ: EDE 548.

### 551 Child and Adolescent Behavior I (3)

Social, intellectual, emotional, physical, and moral aspects of child and adolescent behavior. Emphasis on personal development of the teacher as a prerequisite to understanding children in the elementary school

### 553 Child and Adolescent Behavior II (3)

Review of principles of growth and development. Theories of personality development; clues to identifying children with problems, therapies applicable to elementary and adolescent school children. Case study required. PREREQ: A recent course in child development and completion of 15 hours of course work

### 554 The Self Concept (3)

Self-concept theory and research, implications for development, learning, and behavior, specific application to school settings. PREREQ: Recent course in human development or the equivalent

### 555 Self Development and Interpersonal Skills (3)

Self development, interpersonal, and group communication skills. Focus on helping relationships in educational settings. PREREQ: Recent course in human development or the equivalent

### 556 Seminar in Human Development (3)

Critical issues in human development. PREREQ: Permission of instructor

### 560 Meeting Individual Needs of Children (3)

Discovering each child's needs, providing

for individualized learning; identifying problems and their solutions. PREREQ: Recent course work in elementary education and child development.

**565 Effective Classroom Management (3)**

Dynamics of interpersonal relations in planning and facilitating classroom instruction.

**580-589 Workshops in Elementary Education (1-6)** Additional course numbers will be assigned as new areas of study are announced. Credits vary.

The series presently includes:

**580 Workshop in Elementary Education**

**581 Workshop in Open Education**

**582 Workshop in Social Studies**

**583 Workshop in Creativity**

**584 Workshop in Early Childhood Education**

**585 Workshop in Language Arts**

**586 Workshop in Curriculum Enrichment**

**588 Workshop in Gifted and Talented**

**589 Workshop in Humanizing Teaching and Learning**

**590 Independent Study (1)** Enrollment by permission only; number of credits determined by instructor

**598 Workshop in Elementary Education (3)**

**ECE 598 Workshop in Early Childhood Education (1-6)**

**600 Research Report (1-2)**

**610 Thesis (4-6)**

**695 Seminar in Elementary Education (3)** Selected topics in elementary education.

**GIFTED AND TALENTED**

Symbol: EDG

**542 Creative Thinking: Gifted and Talented**

**(3)** A study of the basic theoretical approaches for encouraging the creative potential of gifted and talented learners

**546 Gifted and Talented: Teaching Strategies and Materials (3)** Program models,

resources, and materials designed to meet the needs of gifted and talented children and youth.

**READING**

Symbol: EDR

**510 Foundations of Reading Instruction: K-12 (3)**

Psychology and pedagogy of reading instruction. The nature of the reading process; the nature of the learner; skill development; instructional strategies. Offered in fall, spring, and summer.

**514 Reading in the Content Areas (3)** The specialized reading skills, reading problems, teaching techniques, and reading activities in content subjects at the elementary and secondary level. PREREQ: EDR 510 or permission of instructor.

**515 Teaching Reading with Children's and Adolescents' Literature (3)** Based on the philosophy that literature should be an integral element of reading programs. The emphasis is on fostering wide reading and response to literature in K-12 reading programs. Students will learn instructional strategies and develop materials and a selected bibliography. PREREQ: EDR 510 and 514.

**516 Reading Disabilities (3)** The nature of reading disability and diagnosis and remediation of reading problems. PREREQ: EDR 510.

**517 Current Practices in Teaching Developmental and Corrective Reading (3)** Developmental and corrective reading instruction. Attention is given to diagnostic procedures and resulting appropriate instruction. PREREQ: EDR 510, 514, 516, 545, and either graduate or undergraduate credits in child and adolescent development.

**519 Teaching Reading to Culturally Diverse Students (3)** Historical, cultural, and educational contexts of literacy, language, and learning as they relate to reading instruction. PREREQ: EDR 516, 517, or permission of instructor

**521 Reading Clinic Practicum and Seminar I (3)** A laboratory course in the diagnosis of

reading difficulties. Major attention given to diagnosing corrective cases and writing case reports. PREREQ: EDR 517 and 519. Offered in fall and summer.

**522 Reading Clinic Practicum and Seminar II**

**(3)** Continuation of EDR 521. Emphasis placed on developing specific skills and techniques for correcting various types of reading disability cases. PREREQ: EDR 521. Offered in spring and summer.

**523 Reading as a Language Process (3)** Basic concepts from areas of phonology, morphology, syntax, semantics, sociolinguistics, dialectology, and psychology will be related to the teaching of reading in grades K-12.

**526 Emerging Literacy and Beginning**

**Reading: A Whole Language Approach (3)**

Concerned with young children's literacy development from preschool through the primary grades. Emphasis on instructional recommendations and implementations for a range of abilities. Included are supervised one-on-one and/or small-group teaching experiences. PREREQ: EDR 510 or permission of instructor.

**540 Seminar in Reading (3)** Critical examination of trends, opinions, and current research in the teaching of reading. PREREQ: EDR 516 or permission of instructor.

**541 Organization and Operation of Reading Programs: K-12 (3)** Practical application of the reading specialist's role in organizing and operating K-12 reading programs. Emphasis on the use of the total school community in meeting individual reading needs. PREREQ: EDR 522 or permission of instructor.

**542 Seminar in Reading Research (3)** A seminar in the basic techniques and sources of research in reading. Exposure to significant research in the field. PREREQ: EDF 501 or permission of instructor

**590 Independent Study (1-6)** Individual investigation and exploration of related reading research. Topic must be approved by the supervising instructor prior to registration.

## Communicative Disorders

Speech and Hearing Clinic

Wayne Hall

West Chester University

West Chester, PA 19383

(215) 436-3401

Mr. Eberhart, *Chairperson*

Dr. Stigora, *Coordinator of Graduate Studies*

### PROFESSOR

Michael S. Weiss, Ph.D., *Purdue University*

### ASSOCIATE PROFESSORS

Lester F. Aungst, Ph.D., *Pennsylvania State University*

Mareile Koenig, Ph.D., *University of Illinois*

Susan Maxwell, M.A., *Ohio University*

Joseph A. Stigora, Ph.D., *Bowling Green University*

Cleavonne S. Stratton, Ph.D., *Ohio State University*

## ASSISTANT PROFESSORS

John L. Eberhart, M.A., *Syracuse University*

Elena F. Stuart, M.S., *Purdue University*

The Department of Communicative Disorders offers the Master of Arts degree in speech pathology. The student may choose a thesis or nonthesis program. Both programs are designed to strengthen the knowledge and skill of the practicing speech clinician, to provide the foundation for further graduate study, and to afford an opportunity to complete requirements toward professional certification by the American Speech-Language-Hearing Association. Attainment of the master's degree does not necessarily guarantee recommendation for certification.

### MASTER OF ARTS IN SPEECH PATHOLOGY (39 Semester Hours)

#### Admission to the Program

In addition to meeting the general requirements for admission to a degree program at West Chester, applicants must:



1. Present an undergraduate background of at least 30 semester hours in the following areas of study: psychology, human development, linguistics, statistics, speech and language development, phonetics, speech disorders, language disorders, hearing disorders, basic speech and hearing science, and clinical experience.
2. Present undergraduate transcripts showing at least a 3.0 average in the last 60 hours of study.
3. Demonstrate a reasonable degree of speech and language proficiency as measured by a written essay and a personal interview.
4. Submit Miller Analogies Test scores for purposes of evaluation and guidance.
5. Submit a log of undergraduate clinical practicum.
6. Submit three letters of recommendation.
7. Submit a 250-word essay describing future goals and aspirations.

#### Admission to Degree Candidacy

1. The applicant may apply for degree candidacy after having completed SPP 501, 502, and 508. Application must be made before the student has completed 15 semester hours of graduate work required for the degree.
2. During the precandidacy period, the applicant must maintain an overall average of 3.0.
3. The applicant must have demonstrated satisfactory performance in clinical practicum at West Chester University.

#### Requirements for the Degree

1. The candidate must meet the general university requirements for the master's degree, including completion of all required courses, with an overall average of 3.0.
2. The candidate must perform satisfactorily on a comprehensive written and oral examination, which may not be taken before the student's final semester of course work. Those who fail the examination may repeat it once. The interval between the two examinations may not exceed one year.
3. The candidate must satisfactorily complete SPP 501, 502, 508, 523, 524, 526, 535, 536, three semester hours of graduate clinical

practicum, plus 12 additional semester hours, chosen under advisement, which must include a graduate course in audiology and a graduate course in organic disorders.

4. The student must be in continuous enrollment. Exceptions may be granted by submitting a written request to the graduate coordinator.
5. The M.A. requires the completion of 350 hours of clinical practicum, with a minimum of 250 hours required at the graduate level. These hours of clinical experience must be obtained in three distinctly different clinical settings. In order to earn the required practicum hours, most students will need to register for several semesters of clinical practicum, however, no more than three semester hours of graduate clinical practicum may be counted toward the 39 semester hours required for the degree.

#### Certification Programs

Candidates for the Master of Arts in speech pathology may be recommended for the Pennsylvania Instructional I Certificate in speech correction upon satisfactory completion of the equivalent of the department's Bachelor of Science in education curriculum. Students who do not qualify for master's degree candidacy may complete a second bachelor's degree in order to be recommended for the Instructional I certificate. In the Department of Communicative Disorders, "Certification Student" designates either (a) nondegree students who already hold the Instructional I certificate and who are earning the Instructional II certificate, or (b) nondegree students who meet the prerequisites for admission to the degree program, but who already hold a master's degree, or its equivalent, in a related field and who wish to meet the requirements for the Certificate of Clinical Competence in Speech Language Pathology issued by the American Speech-Language-Hearing Association.

**The Department of Communicative Disorders has completed revision of its curricula. When recommended changes are approved by the Curriculum and Academic Policies Committee (CAPC), they will become effective immediately. Please check with the department for further details.**

## COURSE DESCRIPTIONS

### COMMUNICATIVE DISORDERS

Symbol: SPP

#### 501 Foundations of Research in Speech Pathology (3)

Introduction to the scientific process and to the interpretation and application of research in the speech sciences. A research project outline required.

**502 Experimental Phonetics (3)** Study of acoustic and physiological mechanisms underlying speech production and perception. Current theoretical models are reviewed and analytical instrumentation demonstrated. Students are provided with laboratory experiences to complement lecture materials.

**508 Neurology of the Speech and Hearing Mechanism (3)** This course provides the student with information concerning the neuroanatomical and neurophysiological mechanisms underlying the speech and hearing process.

**523 Voice Disorders (3)** Examination of classification, etiology, diagnosis, and therapy for functional, organic, and psychological voice disorders.

◆ This course may be repeated for credit

**524 Fluency Disorders (3)** Consideration of the nature, causes, diagnosis, and treatment of stuttering and related disorders of speech flow. Critical review of pertinent research. PREREQ: Permission of department.

**526 Articulation Disorders (3)** Theoretical considerations, research findings, and clinical practices concerning disordered speech sound production.

**535 Language Disorders of Children (3)** Linguistic and neurological aspects of behavior relative to disorders of language in children. Review of etiology, assessment, and treatment. PREREQ: SPP 107 or equivalent.

**536 Aphasia (3)** Study of the behaviors associated with language disorders in adults. Emphasis on etiologies, symptoms, assessment, and rehabilitative procedures.

**543 Therapy for the Hearing Impaired (3)** Evaluative and therapeutic materials and methods applicable to the improvement of communication in hard-of-hearing individuals. PREREQ: SPP 346 or equivalent.

**546 Aural Rehabilitation (3)** Medical, prosthetic, and educational approaches to aural rehabilitation for children and adults. Not open

to students with credit for SPP 346 or equivalent. PREREQ: SPP 343 or equivalent.

**547 Audiometry (3)** Lecture-laboratory course in the measurement of hearing. Not open to students with credit for SPP 347 or equivalent. PREREQ: SPP 343 or equivalent.

**550 Advanced Diagnostic and Therapeutic Methods in Speech Pathology (3)** Current and advanced evaluative methods and materials applicable to the diagnosis and remediation of communication disorders.

◆ **551 Graduate Clinical Practicum (3)** Supervised practice in the Speech and Hearing Clinic. Designed to increase diagnostic and therapeutic skills with children and adults who have communication problems. PREREQ: SPP 351, or equivalent, and permission of department.

◆ **552 Affiliation Practicum (6)** Supervised practice in an affiliated clinic or school. Designed to increase diagnostic and therapeutic skills with children and adults who have communication disorders. PREREQ: SPP 351 or SPP 551 and permission of the department.

**560 Seminar in Speech Pathology (3)** Selected theoretical and clinical areas of speech

pathology and related disciplines. Topics vary each semester according to research developments and student needs. PREREQ: Permission of instructor.

**561 Seminar in Audiology (3)** Selected areas in audiology and related disciplines. Topics vary each semester according to developments in research and student needs. PREREQ: Permission of instructor.

**562 Research Seminar (3)** Development of an individual research project of the student's choice. Research design, methodology, and data analysis will be emphasized. PREREQ: SPP 501. A course in statistics is recommended.

**569 Equipment Workshop (3)** Evaluation,

selection, use, and maintenance of electronic aids for the speech and hearing clinician. Demonstration of equipment for diagnosis, therapy, and classroom use. Students will have ample opportunity to work with tape recorders, auditory trainers, and special calibration techniques.

**573 Administration and Supervision of Speech and Hearing Programs (3)** Nature and scope of supervisory positions in speech and hearing programs. Emphasis on administrative problems.

**580 Orofacial Anomalies (3)** Comprehensive consideration of the nature, causes, diagnosis, and treatment of communication disorders associated with orofacial anomalies, particularly

cleft lip and cleft palate. PREREQ: SPP 203 or equivalent, or permission of department.

**589 Neuromuscular Disorders (3)** Nature, causes, diagnosis, and treatment of communication disorders associated with neuromuscular dysfunction, with particular attention to the cerebral palsies.

**590 Independent Study (1-3)** Individualized research projects, reports, and/or readings in speech pathology or audiology under faculty supervision. PREREQ: Approval of department chairperson.

**598 Workshop in Communicative Disorders (3)**

**610 Thesis (1-6)**

## Computer Science — See Mathematics and Computer Science

### Counselor, Secondary, and Professional Education

207 Recitation Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2958

Dr. Kahn, *Chairperson*

Dr. Deischer, *Assistant Chairperson*

Dr. Gadaletto, *Coordinator of Graduate Studies*

#### PROFESSORS

Harry H. Deischer, Ed.D., *University of Pennsylvania*

Charles W. Good, Ed.D., *Temple University*

Wallace J. Kahn, Ph.D., *University of Maryland*

Yi-Ming Hsu, Ed.D., *University of Georgia*

George M. Thomas, Ed.D., *Temple University*

Shirley A. Walters, Ed.D., *Temple University*

#### Counselor Education

The Counselor Education Program offers two degree programs. The first is a degree-certification program that leads to the Master of Education and the Educational Specialist I Certificate for elementary school counselors or secondary school counselors.

The second leads to the Master of Science degree for persons interested in counseling in community agency and higher education settings.

A handbook describing both programs in detail is available from the department's graduate office.

#### ADMISSION TO THE PROGRAM

An applicant is expected to have an undergraduate degree from an accredited college or university. In addition, he or she must meet an undergraduate grade point average entry requirement of 2.8 on a scale of 4.0.

Students who do not have the required undergraduate grade point average of 2.8 may receive provisional status and permission to take the courses required to complete Competency Area I where they can demonstrate academic ability by maintaining a grade point average of 3.0 or better.

#### ASSOCIATE PROFESSORS

Angelo F. Gadaletto, Ph.D., *University of Virginia*

John Holingjak, Jr., Ed.M., *Temple University*

F. William Leeds, M.A., *University of Pennsylvania*

Richard D. Parsons, Ph.D., *Temple University*

William J. Rahn, M.Ed., *Temple University*

Jay Silverman, Ph.D., *New York University*

#### ASSISTANT PROFESSORS

Cynthia Haggard, Ed.D., *Indiana University*

John L. Hynes, Ed.D., *SUNY-Albany*

Robert S. Kurzinsky, Ed.D., *Nova University*

Carol M. Napierkowski, Ph.D., *University of Connecticut*

Patrick M. Socoski, Ph.D., *University of Pittsburgh*

The Department of Counselor, Secondary, and Professional Education offers a variety of graduate programs leading to professional certification, as well as the Master of Education and Master of Science degrees.

#### DEGREE REQUIREMENTS

Upon meeting admission criteria, students are accepted for Competency Area I. During this phase, they are evaluated for academic achievement and interpersonal relationship skills. Upon successful completion of Competency Area I and departmental recommendations (i.e., formal approval for degree candidacy), students become degree candidates for the remainder of the program, which encompasses advanced work and field experiences. Upon completion of the prescribed work and the advisor's recommendation, candidates must take a comprehensive examination. The degree being pursued will be granted only when the student has met the standards of the Department of Counselor, Secondary, and Professional Education. Students desiring the degree without certification may take a three-credit elective under advisement in lieu of the practicum (EDC 590 or EDC 591).

#### CERTIFICATION

In order to obtain the Educational Specialist I Certificate, the student must successfully complete the required practicum in an approved secondary or elementary school. This course provides an opportunity for the student, under West Chester faculty supervision, to work closely with a professional counselor in a public school. The certificate is issued on the basis of the program approval status of the counselor education program at the University as granted by the Pennsylvania Department of Education.



**MASTER OF EDUCATION: ELEMENTARY SCHOOL COUNSELING OPTION** (42-45 semester hours)

Dr. Kahn, *Program Coordinator*

Competency Area I: EDC 503, 567, 571, EDF 502 12 semester hours  
Competency Area II: EDC 520, 540, 556, 572,

574, 576, 585, EDF 589 24 semester hours

Competency Area III: EDC 590, 593 6 semester hours

Complementary course work 3-6 semester hours  
(EDA 500 or equivalent required)

**MASTER OF EDUCATION: SECONDARY SCHOOL COUNSELING OPTION** (42-45 semester hours)

Dr. Napierkowski, *Program Coordinator*

Competency Area I: EDC 503, 567, 571, EDF 502 12 semester hours

Competency Area II: EDC 520, 540, 556, 573, 575, 576, 585, EDF 589 24 semester hours

Competency Area III: EDC 591, 593 6 semester hours

Complementary course work 3-6 semester hours

**MASTER OF SCIENCE: HIGHER EDUCATION/POST SECONDARY COUNSELING OPTION** (39-45 semester hours)

Dr. Gadaleta, *Program Coordinator*

Competency Area I: EDF 502, EDC 531, 567, 571 12 semester hours

Competency Area II: EDC 530, 540, 556, 578, 579 15 semester hours

Competency Area III: EDC 592, 593 6 semester hours

Complementary course work approved by advisor 6 semester hours

**COURSE DESCRIPTIONS  
COUNSELOR EDUCATION**

Symbol: EDC

**503 Introduction to Guidance Services (3)**

Historical development, philosophical foundations and determinants of guidance services in contemporary elementary and secondary education. Special services, testing, group, and individual counseling, and other elements. Guidance as a profession, ethics, current developments and trends

**520 Counseling for Human Differences (3)**

Examination of differences manifested by individuals. The purpose of the examination is to prepare counselors for designing counseling strategies appropriate to the uniqueness of the client.

**530 The College Student (3)** In the face of increasing demands for relevance, flexibility, and vitality in the college community, workers in higher education need to know contemporary students. Students will explore several aspects of the life and work of today's young adults.

**531 Introduction to Counseling in Higher Education (3)** Introduction to the type of counseling services that are provided in higher education and to the settings in which these take place.

**540 Assessment Methods in Guidance (3)** Emphasis is on the test and nontest assessment of intelligence, achievement, special abilities, and aptitudes, including concepts such as reliability, validity, and standardization.

**545 Psychometric Interpretation (3)** A survey course involving the use of psychometrics as the vehicle for the diagnosis of learning problems. Test interpretation and reporting are emphasized.

**556 Career Development Theories and Practices (3)** Theories and techniques relating to career development in children, adolescents, and adults. Career development programming within the context of a systems approach is stressed

**567 Group Dynamics (3)** This course in group processes focuses on the identification of the implicit and explicit role functions of the group member and the group leader. The recognition and awareness of one's behavior with multiple feedback sources is of primary

concern. The major objective of this course is to initiate, develop, and master relationships in a group setting.

**568 The Professional Counselor in the Elementary School (3)** Role, responsibilities, and practices of the contemporary elementary school counselor. Development of the guidance program; relationship to curricula; position of the counselor with respect to administration, parents, children, and teachers.

**569 The Professional Counselor in the Secondary School (3)** Role, responsibilities, and practice of the contemporary secondary school counselor. Referral resources, parental conference techniques, relationship with administration and staff, curricula, administrative aspects of the guidance program.

**571 Theories of Counseling (3)** The basic theories of counseling, with emphasis on historical and philosophical origins. Historical antecedents of each theory, and evaluation of the potential of each theory as a viable approach for school counselors.

**572 Counseling Techniques in Elementary School (3)** Practical application of basic theories and techniques of individual counseling with children in elementary school settings. The prepracticum course includes actual counseling experience with children

**573 Counseling Techniques in Secondary School (3)** Practical application of the basic theories and techniques of individual counseling with adolescents in secondary school settings. This prepracticum course includes actual counseling experience with adolescents

**574 Group Procedures in the Elementary School (3)** Emphasis is on mastering the basic theories and techniques appropriate to group procedures in the elementary school. Exposure to planning, implementing, and evaluating group activities.

**575 Group Procedures in the Secondary School (3)** Mastery of theories and techniques basic to planning and implementing group activities in the secondary school. Evaluation of group activities is also stressed

**576 Consultation and Coordination in Guidance and Counseling (3)** This prepracticum course focuses on models, mechanisms, and strategies of employing consultation and coordination in remedial and preventive interventions in educational settings. Systems

analysis and program development and evaluation will be addressed relative to consultation and coordination.

**578 Counseling Techniques with Adults (3)** A prepracticum experience in counseling adults. Application of principles and practices, preparation and techniques for group counseling

**579 Group Procedures with Adults (3)** Techniques for planning and implementing group procedures applicable to adults. Topics include group counseling, group guidance, multiple counseling, problem solving and decision making, task group facilitation, conflict mediation, group process and outcome evaluation, and the legal/ethical implications of group work. Each student is required to conduct a group counseling experience.

**585 Contemporary Issues and Trends in Guidance (3)** Contemporary issues and current trends in school guidance. The student evaluates basic positions and integrates them into the prospective role of a school counselor

**590 Practicum in Elementary Guidance (3)** Supervised practice in an approved elementary school. In addition to work under the direction of a professional counselor in the school setting, the student meets on campus with the practicum supervisor for intensive seminar activities. PREREQ: EDC 572, 574

**591 Practicum in Secondary Guidance (3)** Supervised practice in an approved secondary school. The student works under the direction of a professional counselor in the school setting and meets on campus with the practicum supervisor for intensive seminar activities. PREREQ: EDC 573, 575

**592 Practicum in Higher Education Guidance (3)** Supervised counseling experiences within the higher education system or another approved setting. A related on-campus seminar is included. PREREQ: EDC 578, 579

**593 Advanced Practicum (3)** Intensive supervised counseling experience in an approved setting. The practicum consists of on- and off-campus experiences. PREREQ: EDC 590 or 591 or 592

**598 Workshop in Counselor Education (3)**

**599 Independent Study (1-3)** Independent research and study under the direction of a faculty member. PREREQ: Permission of department chairperson and instructor

## Secondary Education and Professional Studies

The Secondary Education and Professional Studies program is responsible for the professional courses offered for certification on the secondary level and in the Master of Education degree programs having academic concentrations. The department also offers other professional course work required in all M.Ed. programs, and some courses designed for educators and others who wish to develop new insights and to strengthen professional skills.

In addition, the department offers a Master of Education in secondary education.

### MASTER OF EDUCATION

The Master of Education program has concentrations in **chemistry, French, German, history, Latin, mathematics, and Spanish**, offered cooperatively by the School of Education and the College of Arts and Sciences. The academic requirements for each concentration are found under the respective department.

With this degree, students can strengthen their knowledge in the major subject area, as well as their professional knowledge and competence.

Students earning degrees in this program must be advised both by the department of the subject field and by the Department of Counselor, Secondary, and Professional Education. Students are responsible for arranging conferences with both departments to plan their programs.

#### Requirements for the Master of Education

(36 semester hours)

#### I. Professional Education Requirements\* 12 semester hours

- A. EDF 510 Educational Foundations (3)
- B. A minimum of one course from each of the following groups:

##### Group 1

- EDF 516 Resource Allocation in the Schools (3)
- EDF 520 Comparative Education (3)
- EDF 580 History of American Education (3)
- EDF 581 Philosophy of Education (3)
- EDF 589 Sociological Foundations of Education (3)

##### Group 2

- EDF 503 The Emerging Curriculum (3)
- EDF 507 Values Clarification in Human Relations (3)
- EDF 509 Contemporary Teaching Trends (3)
- EDP 531 Principles of Educational Testing (3)
- EDP 550 Advanced Educational Psychology (3)
- EDP 557 Essentials of Learning (3)
- EDP 560 Behavior Modification (3)
- EDP 569 Adolescent Development and Learning (3)
- EDS 524 Supervision of Student Teaching (3)
- EDU 502 Human Relations in the School and Community (3)

##### Group 3

- EDC 567 Group Dynamics (3)
- EDF 504 Middle School Workshop (3)
- EDF 505 Individually Prescribed Instruction (3)
- EDF 506 Design and Use of Individualized Learning Packages (3)
- EDF 570 The Community/Junior College (3)
- EDF 590 School Law (3)
- EDS 502 Secondary School Curriculum (3)
- EDU 501 Curricular Adaptations for the Disadvantaged (3)

## II. Subject Matter Concentration

### Requirements

20-22 semester hours

- A. Methods and Materials of Research (2-3)
- B. Academic Subject (18-20)

(See respective academic department for details)

## III. Electives (Professional or Academic)\* 0-4 semester hours

### Comprehensive Examinations

The student must perform satisfactorily on the final comprehensive examination covering the subject matter concentration and the professional education requirements.

### MASTER OF EDUCATION IN SECONDARY EDUCATION

(36 semester hours)

Dr. Thomas, *Program Coordinator*

This program, another option within the Master of Education shown immediately above, is designed primarily to strengthen the professional knowledge, skills, and understanding of the graduate student and of teachers in service, and to make their preparation more relevant to a variety of educational situations. It also provides the professional background for dealing effectively with problems encountered in secondary schools. Its 15 semester-hour elective area allows students to strengthen their knowledge in the subject.

### Admission to the Program

In addition to meeting admission requirements of the University, the student must:

1. Be approved by the Department of Counselor, Secondary, and Professional Education for graduate work.
2. Attain an acceptable score on the Graduate Record Examination or the Miller Analogies Test. It is strongly recommended that the applicant have a valid teaching certificate. Applicants whose certification is not in secondary education may, at the department chairperson's discretion, be required to take course work beyond the minimum semester-hour requirements for the degree.

Upon admission, students will be assigned advisors who will help them to outline the appropriate program. All work for the program must be approved by the advisor and the departmental graduate committee.

### Requirements for Admission to Degree Candidacy

During the precandidacy period, the student must:

1. Attain full status, if admission status to the program was provisional.
2. Complete these required courses: EDF 500, 510, and EDP 550.
3. Achieve a minimum overall grade point average of 2.75 and a minimum grade point average of 3.0 in the required courses in the area of concentration.
4. Show evidence of academic, personal, and professional qualities that satisfy the advisor and the departmental graduate committee.

### Comprehensive Examination

Students must perform satisfactorily on a written comprehensive examination, which is given at least once in each semester and in the regular summer session. The examination is always given at 6 p.m. on Tuesday of the second week of the semester or summer session.

\* Chosen in conference with the secondary education and academic advisors according to the students' needs

Application forms for the comprehensive examination are available from the department and must be filed with the department by December 1 for the spring semester, May 1 for the regular summer session, and July 14 for the fall semester.

To be eligible, students must have:

1. Taken the required courses: EDF 500 and 510 and EDP 550.
2. Completed 28 semester hours of work, including the nine semester hours of required courses and 12 semester hours from the area of concentration.
3. Attained a minimum overall average of 2.75 and a minimum average of 3.0 in the required courses and the courses in the area of concentration.
4. Received their advisors, recommendations and the approval of the departmental graduate committee.

Students who fail the comprehensive examination are allowed a second attempt. A second failure terminates candidacy.

## COURSE DESCRIPTIONS

### FOUNDATIONS

Symbol: EDF

**500 Methods and Materials of Research in Education (3)** Historical, descriptive, and experimental methods of research. Methods for locating, evaluating, interpreting, and reporting research data. Each student prepares a research prospectus.

**501 Methods and Materials of Research for Elementary Education (3)** Historical, descriptive, and experimental methods of research. Methods for locating, evaluating, interpreting, and reporting research data. Introduction to graduate study for elementary majors.

**502 Methods and Materials of Research for Counselor Education (3)** Designed to enable the counselor to read experimental, quasi-experimental, descriptive, and correlational research reported in the professional journals. Both univariate and multivariate designs are emphasized.

**503 The Emerging Curriculum (3)** Curriculum trends, beginning in 1951, for grades kindergarten through 12 by means of three comprehensive topics: (1) the curriculum reform movement, (2) emerging curriculum theory and practice, and (3) the educational reform movement.

**504 Middle School Workshop (3)** Philosophy, administration, curriculum, staff, and facilities necessary for the most efficient educational experience in the intermediate levels of school.

**505 Individually Prescribed Instruction (3)** Individually prescribed instructional techniques as applied in the classroom and intensive learning centers. Techniques of academic diagnosis, prescription production, and electronic learning. Students will have an opportunity to work directly with hardware and software components of an intensive learning center. (May be arranged as a workshop.)

**506 Design and Use of Individualized Learning Packages (3)** A review of commercially available individualized learning activity packages that permit students to progress through a learning continuum at their own

pace. Students will be required to design and construct individualized learning packages in their teaching areas.

**507 Values Clarification in Human Relations (3)** Knowledge of the theories of the values clarification processes as defined by Simon and others. Skills in application of the values clarification processes in personal decisions, in the classroom, and in society. (May be arranged as a workshop or as modularized independent study.)

**509 Contemporary Teaching Trends (3)** Team teaching, programmed instruction, and various media of communication in the elementary and secondary schools are evaluated. Effective adaptation to newer practices is emphasized.

**510 Educational Foundations (3)** History of education, integrated with educational philosophy and thought; the long evolution of education theory and issues.

**515 Federal and State Role in Education (3)** The past, current, and future role of the federal and state governments in education in the United States. Emphasis on applications to the Commonwealth of Pennsylvania. Impact of federal legislation since 1958.

**516 Resource Allocation in the Schools (3)** The relationship between the American economy and the efficient allocation of resources within school systems will be examined. Designed for teachers, administrators, school board members, and parents.

**520 Comparative Education (3)** Major problems of education in a number of other countries are related to similar problems in the United States. Contrasting purposes and philosophies, and differences in organization and administration are analyzed.

**570 The Community/Junior College (3)** An analysis of the programs, problems, and students of a two-year college. Emphasis on the development, special philosophies, and current issues relating to the community or junior college. Designed for students preparing to be teachers and/or administrators in these colleges.

**580 History of American Education (3)** Nature and direction of American education, studied through individual and group research.

## Requirements for the Master of Education in Secondary Education

(36 semester hours)

- I. Required Courses** 9 semester hours  
EDF 500 and 510, EDP 550
- II. Area of Concentration Requirements** 12 semester hours  
A minimum of 12 semester hours must be selected from the following:  
EDF 503, 504, 505, 506, 507, 509, 515, 516, 520, 570, 580, 581, 589, 590; EDP 531, 557, 560, 561, 569; EDS 502, 524; EDU 501, 502

- III. Electives** 15 semester hours  
The electives may be from courses listed above, or from courses in the student's teaching field. They may also be a combination of both.

**581 Philosophy of Education (3)** Selected philosophies and their influence on educational principles and practices in a democratic social order.

**589 Sociological Foundations of Education (3)** Study of the socio-cultural influences on the structure of American educational institutions.

**590 School Law (3)** Legal structure for educational organization on state, intermediate, and local levels. Legal status of the board of education; legal responsibilities of the teacher, legal responsibilities of the board of education to the student.

**598 Workshop in Secondary Education (3)**

**599 Workshop in Professional Education (3)**

## EDUCATIONAL PSYCHOLOGY

Symbol: EDP

**531 Principles of Educational Testing (3)** Designed to develop in teachers the skills important in the three areas of educational testing: teacher-made tests (objective and essay); computerized programs for grading and reporting results and for improving the test quality through item-analysis procedure, and the evaluation of the psychometric characteristics of standardized tests.

**550 Advanced Educational Psychology (3)** Processes by which skills, understanding, concepts, and ideals are acquired, teaching practices in relation to basic research concerning learning; similarities and differences in theories of learning.

**557 Essentials of Learning (3)** Study of the applications of learning theory to classroom teaching, with emphasis on those principles derived from classical and operant conditioning. Retention and transfer of learning also considered.

**560 Behavior Modification (3)** Study of principles of classical and operant conditioning as they relate to the modification of student behavior in residential and educational settings. Emphasis on such areas as classroom discipline, student values, and student study habits.

**569 Adolescent Development and Learning (3)** Mental, physical, emotional, and social development and behavior of the adolescent.

with emphasis on various types of learning. Case studies are used.

### 598 Workshop in Educational Psychology (3)

## SECONDARY EDUCATION

Symbol: EDS

### 502 Secondary School Curriculum (3) Current

practices and trends in reorganizing the secondary school curriculum in the major academic areas. The various integrating techniques. Curriculum development.

### 524 Supervision of Student Teaching (3)

Designed for teachers who cooperate, or expect to cooperate, in West Chester's student teaching

program. Basic principles, practices, materials, and resources for an effective student teaching program. PREREQ: Certification for teaching.

**590 Independent Study (1-3)** Enrollment by permission only; number of credits determined by department.

### 599 Workshop in Secondary Education (3)

## Educational Research

Dr. Hsu, *Program Coordinator*

The School of Education offers a degree program leading to the Master of Science in educational research. The degree is designed primarily for those desiring research positions in local school districts, but it is also appropriate for research positions in colleges and universities, community colleges, governmental agencies, regional educational laboratories, and industry.

## MASTER OF SCIENCE IN EDUCATIONAL RESEARCH

### Admission to Degree Program

To be admitted to the program, the applicant must have:

1. A minimum overall average of 2.5 in undergraduate studies and 2.75 in the major field.
2. Satisfactory performance on the Graduate Record Examination Aptitude Test.
3. Personal interview with the coordinator of the program.

Any candidate admitted to graduate study, but not to the degree program in educational research, may take RES courses with the permission of the coordinator. There is no guarantee that courses taken by a nondegree student may later satisfy degree requirements for the M.S. in educational research.

### Requirements for Admission to Degree Candidacy

Upon completion of 12 semester hours, which must include PSY 501 (Introductory Statistics for the Behavioral Sciences) and EDF 500 (Methods and Materials of Research in Education), candidates will be advanced to degree candidacy, provided they have maintained a minimum average of 3.0 and passed a qualifying examination.

### The Internship

After mastery of the core courses (PSY 501, EDF 500, PSY 502, and RES 520), students will serve an internship with an outside agency, or in the Office of Institutional Research conducting educational research. During this period, they will use the skills they have developed to design and conduct a research project under the joint supervision of University and/or host institutional personnel.

### Requirements for the Degree

1. Satisfactory completion of the curriculum outlined below.

2. An overall average of 3.0 in graduate courses taken in the degree program.
3. Satisfactory performance on the comprehensive examination.
4. Completion of research report or master's thesis, approved by the coordinator.

### The Comprehensive Examination

To be eligible for the comprehensive examination, the candidate must:

1. Have completed at least 28 semester hours and all core courses prior to the semester in which the examination is taken.
2. Have maintained an overall average of at least 3.0. Candidates must indicate by letter their intention to take the examination. The coordinator should receive this letter within the first 10 days of the semester in which the candidate wants to take the examination.

Candidates who fail the comprehensive examination are permitted one re-examination after an interval of at least one semester but not more than two years.

### Master of Science in Educational Research

(36-39 semester hours)

- CSC 550 Computers in Education (3)
- EDC 540 Assessment Methods in Guidance (3)
- EDF 500 Methods and Materials of Educational Research (3)
- EDF 510 Educational Foundations (3)
- EDP 531 Principles of Educational Testing (3)
- EDP 550 Advanced Educational Psychology (3)
- PSY 501 Introductory Statistics for the Behavioral Sciences (3)
- PSY 502 Advanced Statistics for the Behavioral Sciences (3)
- RES 520 Research Design (3)
- RES 590 Independent Study in Educational Research (1-3)
- RES 592 Internship Program in Educational Research (3)

Optional:

- RES 650 Research Report (3) plus three-credit elective or
- RES 610 Thesis (3)

### Elective courses:

- CSC 510 Computer Programming and Numerical Methods (3)
- EDP 540 Methods of Program Evaluation (3)
- PSY 526 Program Evaluation (3)

Others to be determined by program coordinator.

## COURSE DESCRIPTIONS

### EDUCATIONAL RESEARCH

Symbol: RES

**520 Research Design (3)** Principles for efficient design of experiments and other types of observational programs. Sampling techniques, methods of analysis, threats to valid inference. PREREQ: PSY 501.

**590 Independent Study in Educational Research (1-3)** Research project, reports, readings in educational research. PREREQ: Coordinator's approval.

**592 Internship Program in Educational Research (3)** Opportunity for students to design, conduct, and analyze a study and to prepare a report of the research. The internship

is served in local educational agencies, county offices, federal project centers, the Pennsylvania Department of Education, or other research environments. The intern is supervised by both host and University personnel.

### 610 Thesis (3)

### 650 Research Report (3)

## Environmental Education

Mr. John Holingjak, *Coordinator*

Graduate students interested in developing a concentration in the area of environmental education may elect from the following courses.

### COURSE DESCRIPTIONS

#### ENVIRONMENTAL EDUCATION

Symbol: EDO

**505 Conservation Education Curriculum (K-12) (3)** Conservation education as it exists in the present school curriculum and ways to integrate conservation into elementary and secondary school disciplines. Characteristics, interrelationships, and uses of our natural resources; problems and policies of industrial management in conservation as they relate to the school curriculum.

#### 510 Methods in Conservation Education (3)

Basic concepts and practices of conservation and outdoor education and their role in the school program.

#### 511 Environmental Education Workshop

**(3)** A field-centered learning experience. Designed to integrate the wide range of backgrounds and interests among the participants. Based on West Chester campus and/or the campuses of other universities.

**515 History of Conservation (3)** Development of the conservation movement in the U.S. with emphasis on the progressive adaptation of

conservation to our changing social and economic order

#### 520 Organization and Administration of Outdoor Education (3)

Basic concepts of outdoor education: the role of outdoor education in the school program; the initiation and administration of outdoor education.

**525 Independent Studies in Environmental Education (3)** Special research projects, reports, and readings in conservation and outdoor education. PREREQ: Permission of coordinator

#### 598 Workshop in Environmental Education (3)

## Urban Education

Mr. Leeds, *Coordinator*

Graduate students interested in developing a concentration in the area of urban education may elect from the following courses.

### COURSE DESCRIPTIONS

#### URBAN EDUCATION

Symbol: EDU

**501 Curricular Adaptations for the Disadvantaged (3)** Curricular innovations that attempt to aid the culturally disadvantaged in

developing skills necessary for maximum personal adjustment to society. Survey of urban problems and their relationships to inner-city schools.

**502 Human Relations in the School and Community (3)** Intensive study of the inner-

city community and its close relationship with the school society. Analysis of prejudice and its implication in community and school power structures.

#### 590 Independent Study (1-3)

#### 599 Workshop in Urban Education (3)

## Criminal Justice

200 Ruby Jones Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2647

Dr. Greenberg, *Chairperson*

Dr. Metz, *Coordinator of Graduate Studies*

### ASSOCIATE PROFESSORS

Saul H. Greenberg, J.D., *University of Baltimore*  
Harold W. Metz, Ed.D., *West Virginia University*

### ASSISTANT PROFESSORS

Reginald Nealy, M.H.S., *Lincoln University*  
Jana L. Nestlerode, J.D., *Delaware Law School of Widener University*  
Anthony W. Zumpetta, Ed.D., *Indiana University of Pennsylvania*

### MASTER OF SCIENCE IN CRIMINAL JUSTICE

(36 semester hours)

West Chester University offers a Master of Science degree in criminal justice which is multidisciplinary and flexible, career oriented, and the basis for pursuit of further graduate study.

### ADMISSION REQUIREMENTS

All students must meet the general requirements for admission to a graduate degree program at West Chester University. Applications are processed by the Office of Graduate Studies. Upon receipt of all necessary credentials, Graduate Studies will forward the materials to the Criminal Justice Department for further consideration and approval. There is no test requirement (GRE or MAT) for admission to the program. To receive additional information or to schedule a personal interview, contact the graduate coordinator

### DEGREE REQUIREMENTS

The following requirements must be met by all candidates prior to receiving the Master of Science degree in criminal justice

1. The candidate must complete a minimum of 36 semester hours of course work with a cumulative average of 3.0 (based on a 4.0 system).

2. The candidate must pass a comprehensive examination.

The program includes the following requirements:

#### Required Courses

15 semester hours

CRJ 500 History and Philosophy of Criminal Justice (3)

CRJ 503 Criminal Behavior (3)

CRJ 508 Research Design and Analysis (3)

CRJ 509 Criminal Law and Procedure (3)

CRJ 600 Proseminar (3)

#### Criminal Justice Electives

18 semester hours

#### Noncriminal Justice Electives

3 semester hours

### COURSE DESCRIPTIONS

#### CRIMINAL JUSTICE

Symbol: CRJ

##### 500 History and Philosophy of Law and Justice (3)

This course is intended to aid the beginning graduate student in understanding the historical and philosophical influences on the American criminal justice system, and examine and analyze various other systems of criminal justice found in divergent and dissimilar cultures.

**503 Criminal Behavior (3)** This course is designed to help the student understand behavior by comparing criminal with normal behavior. It is a survey course that reviews types of abnormal behavior and mental disorders, methods of diagnosis, and treatment and resolution of internal personal conflicts. Also included is an understanding of criminal behavior as it applies to abnormality.

##### 504 Resolution of Internal Personal Conflicts (3)

This course is designed so that students can develop personal effectiveness in group situations. Emphasis will be on the development of competence in group leadership, ability to translate the group experience into positive decisions about self and environment, and the ability to recognize changes that have affected one's life. The knowledge gained from this course will assist students in relating to other persons in their personal, social, and professional lives.

**505 Theories of Criminal Justice (3)** This course is a survey of the historical and contemporary attempts to explain the phenomena of crime and criminal behavior from the perspectives of sociology, psychology, economics, biology, and law. Emphasis will be placed on the examination of contemporary theories and the analysis of evidence supportive of various theoretical positions.

**506 Criminal Justice Management (3)** This course is intended to aid in the instruction of graduate students who are potential candidates for administrative positions. It brings together the most appropriate concepts from the various approaches and problems to management, e.g., staffing, decision making, motivation, leadership, communication, and control.

##### 507 Ethical Issues in Criminal Justice (3)

This course is designed to identify and examine ethical issues among practitioners and students in the criminal justice field. Such issues include the discretionary power of arrest, the use of deadly force, the decision to prosecute, participation in plea bargaining, representation of the guilty, and the imposition of punishment.

**508 Research Design and Analysis (3)** This course is intended to introduce the graduate student to the process of social research. It discusses research concepts such as problem

identification, data collection, data analysis, hypothesis testing, and the development of conclusions and recommendations.

**509 Criminal Law and Procedure (3)** This course is designed to encompass the basic concepts of criminal law and then to examine criminal procedure in greater depth. It will teach not only the foundations of these fields of study, but will also bring to light the reasons underlying these foundations and the latest developments from the U.S. Supreme Court. This will be accomplished through the reading and analysis of selected cases and statutes.

**510 Criminal Justice Planning (3)** This course is intended to aid in the instruction of graduate students who are potential candidates for planning, evaluation, or administrative positions. Given the newness of criminal justice planning, this course represents a beginning effort of a comprehensive discussion and review of organizational planning, as well as program and personnel evaluation.

**520 Major Case Management (3)** This course introduces some of the investigative and administrative techniques used in major crimes. Focus will be placed on early recognition of crime dimensions for precise applications and control of available personnel, equipment, and resources.

**522 White-Collar Crime (3)** This course analyzes the usually nonviolent criminal conduct variously described as white-collar crime, official corruption, systematic crime, corporate crime or violations of trust that are characterized by calculation, deceit, and personal enrichment in one's job or profession. The influence of organized crime is also explored.

**524 Juvenile Law (3)** This course will bring together the leading cases that have reached the Supreme Court, as well as other important federal- and state-court decisions relating to the juvenile justice process.

**526 Policing in America (3)** This course is designed to examine current policing strategies and political issues that have developed as a result of those strategies. It will also explore the future of policing in America and present several interdisciplinary approaches to new theoretical perspectives.

##### 530 Interviewing and Counseling the Offender (3)

In this course, techniques of counseling applicable to law enforcement and corrections officers are explored. Areas of study include the initial interview, interrogation, handling the informer, manipulative behavior of offenders, report writing, and the exit interview. Role playing and sociodrama are used.

**532 Correctional Law (3)** A course designed to provide the practitioners who are involved in the correctional process with a basic introduction to the emerging field of law in this area. It also encourages understanding the rights and responsibilities of those convicted of crimes.

**535 Assessment of the Offender (3)** This course will develop one's ability to understand, recognize, describe, and interpret psychometric measures associated with juvenile and adult offenders. The student will develop an understanding of the use of tests in the criminal justice field.

##### ◆555 Topical Seminar in Criminal Justice

**(3)** This course will provide an intensive examination of a selected area of study in the field of criminal justice. Topics will be announced at the time of offering. This course may be taken more than once when different topics are presented.

**560 Notable Criminal Cases (3)** In this course, selected factual accounts of criminality and criminal behavior over the past 75 years are analyzed. Selection of cases is based on notability and continual dispute.

**566 Contemporary Issues in Corrections (3)** This course is designed to analyze contemporary issues in the area of corrections. Such issues will include flat-time sentencing, private corrections, diversion, prison industries, inmate unions, and the elimination of parole.

**570 Women, the Elderly, and Crime (3)** This course is intended to introduce graduate students to the specific problems and conditions associated with crimes perpetrated on women and the elderly and on victimization. This course will focus on the criminology, the law, and the response of the criminal justice system to the uniqueness of crimes involving women and the elderly.

**582 Contemporary Legal Issues (3)** This course will pose to the student the polychotomous nature of many issues within the criminal justice system, with a view to finding a practical resolution. The pros and cons of the most controversial and the most contemporary legal issues will be examined. Students will be required to perform some independent research and share the results with classmates.

**590 Practicum (1-6)** A field experience (internship) program for preservice students only.

##### 599 Independent Studies in Criminal Justice

**(1-3)** This course will entail research projects, reports, and readings in criminal justice. Approval of the department chairperson is required.

**600 Proseminar (3)** Each graduate student will be expected to participate in a proseminar. The end result of this seminar will be a completed research paper evaluated on the basis of selection of topic and quality of research. **PREREQ:** CRJ 508.

**610 Thesis (6)** Bound and shelved in the library, the thesis represents the student's ability to plan, organize, and direct a research effort designed to discover, develop, or verify knowledge.

##### 999 Transfer Credits (3-6)

◆ This course may be repeated for credit.



**Earth Science — See Geology and Astronomy**

**Economics — See Business**

**Elementary Education — See Childhood Studies and Reading**

## English

541/531 Main Hall

West Chester University

West Chester, PA 19383

(215) 436-2745/ 436-2822

Dr. Hunsberger, *Chairperson*

Dr. McGrath, *Coordinator of Graduate Studies*

### PROFESSORS

Michael W. Brooks, Ph.D., *University of Toronto*

Joseph Browne, Ph.D., *University of Pennsylvania*

John L. Gaunt, Ph.D., *University of Maryland*

Paul D. Green, Ph.D., *Harvard University*

John P. Kent, Ph.D., *University of Illinois*

Alice B. Markow, Ph.D., *University of Pennsylvania*

Dwight L. McCawley, Ph.D., *University of Illinois*

Lynette McGrath, Ph.D., *University of Illinois*

David E. McKenty, Ph.D., *University of Pennsylvania*

Kostas Myrsiades, Ph.D., *University of Indiana*

C. James Trotman, Ed.D., *Columbia University*

Robert H. Weiss, Ph.D., *Temple University*

Elsie B. Ziegler, Ed.D., *Temple University*

### ASSOCIATE PROFESSORS

William D. Fordyce, Ph.D., *Harvard University*

Claude Hunsberger, Ph.D., *University of Wisconsin*

John T. Kelly, Ph.D., *University of Oklahoma*

Elizabeth Larsen, Ph.D., *University of Wisconsin—Milwaukee*

William G. Prater, Ph.D., *Ohio University*

John W. Ward, Ph.D., *University of Delaware*

### ASSISTANT PROFESSORS

Dennis Godfrey, Ph.D., *University of Michigan*

Garrett Molholt, Ph.D., *University of Wisconsin*

Geetha Ramanathan, Ph.D., *University of Illinois*

Ruth Sabol, Ph.D., *University of Wisconsin*

Judith Scheffler, Ph.D., *University of Pennsylvania*

Carol Shloss, Ph.D., *Brandeis University*

The Department of English offers the Master of Arts in English. The Master of Arts permits the student to attain a number of goals. It furthers scholarship and learning in literature, language, and writing, providing the student with experience in critical reading and writing skills; the M.A. may be a preface to doctoral study or provide a foundation for teaching in high schools, community, or junior colleges. The Department of English also participates in an interdisciplinary program leading to the Master of Arts in Teaching English as a Second Language. (See Teaching English as a Second Language.)

In addition, the Department of English welcomes students who wish to take courses for professional growth and provides assistance and advice to students wishing to acquire teaching certification in English.

### ADMISSION TO THE DEGREE PROGRAM

The applicant must (1) meet the general requirements for admission to degree study at West Chester University (see appropriate pages at the beginning of the Graduate Studies Catalog); (2) submit a 5-6 page writing sample directly to the English Department graduate coordinator; (3) submit results of the General Aptitude Test of the Graduate Record Exam; (4) satisfy other departmental admission requirements established in consultation with the graduate coordinator; (5) take additional graduate and/or undergraduate courses when considered necessary.

### MASTER OF ARTS IN ENGLISH

(33 semester hours)

#### Degree Requirements

##### Required

9 semester hours

ENG 500 and ENG 501 (or equivalent methods and theory courses as required for different concentration options listed under Option II) to be taken before the completion of 12 semester hours of graduate credit.

ENG 620 M.A. Essay (about 40 pages) to be completed at the end of course work under the direction of an advisor *selected in consultation with the graduate coordinator*. An oral defense of this essay will also be required.

#### Course Selection Options

24 semester hours

In addition to the three required courses specified above, all students will take eight courses *selected in consultation with the graduate coordinator* according to one of the following options:

#### OPTION I

1. any medieval course
2. any 16th/17th century British course
3. any Restoration/18th century British course
4. any 19th century British course
5. any 20th century British course
6. any pre-20th century American course
7. any 20th century American course
8. a free elective chosen in an area relevant to the topic of the M.A. Essay

Option I is especially recommended for students who do not already have a strong undergraduate record in English.

#### OPTION II

- 1) four courses chosen from four of the areas listed above
- 2) four courses chosen in a concentration area, such as creative writing, comparative literature, medieval, Renaissance, 18th century, 19th century, 20th century British and/or American, women's literature, African-American and ethnic literature, linguistics, etc. In some concentrations, the methods and theory courses will be specific to the concentration. Concentrations may be proposed by students, but they should be chosen early in the student's program and must be approved by the graduate coordinator. The M.A. Essay should be written in the area of the concentration. One course in the concentration may be a compatible course from another department. For more information concerning graduate work in English, including course listings for possible concentrations and precise specifications for the M.A. Essay, see the *Handbook for Graduate English Studies* available from the English graduate coordinator

**COURSE DESCRIPTIONS****ENGLISH**

Symbol: ENG

**GENERAL TOPICS AND THEORY****500 Methods and Materials of Research (3)**

Basic techniques and procedures in research. The major types of research and the methods of locating, evaluating, and interpreting evidence. Includes the preparation of a research outline and paper.

**501 Literary Theory (3)** Study of various methods of literary theory and analysis; the application of these methods to specific works of literature.

**502 History of Criticism (3)** A historical study of literary criticism and aesthetic theory from Plato and Aristotle to the present.

**503 Feminist Literary Criticism (3)** A study of the development of feminist criticism and different schools of feminist literary theory. Application of feminist theory to specific texts.

**504 Methods and Materials of Publishing (3)** This course is designed to familiarize graduate students with the history of the book and to provide them with the opportunity to gain practical experience in book production.

**507 Literature Seminar (3)** Variable topics announced each time the course is offered.

◆**508 Writing Seminar (3)** Experience in nonfiction prose writing; discussion and development of major projects.

◆**509 Writing Seminar in the Novel I (3)** A course in the writing and preparing of book-length manuscripts (novel and novella), with the intention of submission for publication. Also includes coverage of fictional aspects and techniques used in writing memoirs, biography, current history.

**510 Writing Seminar in the Novel II (3)**

Continuation of ENG 509.

**ENGLISH LITERATURE**

**517 Beowulf (3)** An analysis of the full poem in Old English. Emphasis on the artistic, linguistic, and historic values. PREREQ: ENG 584 or equivalent.

**518 Chaucer (3)** A study of the *Canterbury Tales* and *Troilus and Criseyde*.

**519 16th Century Poetry and Prose (3)** A survey of the major poetry and prose written in England during the Tudor period from Skelton to Shakespeare.

**520 Spenser and Milton (3)** The major works of Spenser and Milton studied in relation to the intellectual climate of the Renaissance. Emphasis on *The Faerie Queene* and *Paradise Lost*.

**521 Major Renaissance Writers (3)** An in-depth study of major figures in the Renaissance. Intellectual background and literary influences. Variable topics.

**522 English Drama to 1642 (3)** A survey of English drama (exclusive of Shakespeare) from its medieval beginnings to the closing of the theatres in 1642.

**523 Shakespeare's Sisters (3)** Poetry, prose, and drama by Renaissance women writers.

◆This course may be taken again for credit

Includes Elizabeth I, Mary Wroth, Elizabeth Cary, Amelia Lanier, Katherine Philips, Bathsua Makin, and others. Topics addressed include women's education, attacks on and defenses of womankind, love poetry by men and women, heroic women, and "a woman's place."

**525 Shakespeare's Tragedies and Histories (3)** Histories and tragedies read with analysis of dramatic and poetic effects.

**526 Shakespeare's Comedies and Poems (3)** The comedies analyzed. The poems read in relation to Shakespeare's developing dramatic and poetic power.

**527 17th Century Poetry and Prose (3)** An in-depth study of the major poets and prose writers from Donne to Milton.

**529 18th Century Poetry and Prose (3)** A study of the literature of the era, with emphasis on the cultural context, aesthetic theory, and the evolution of poetic techniques.

**530 Restoration and 18th Century Drama (3)** Critical history of the British drama from the reopening of the theatres to Sheridan. Major playwrights and study of theatre history.

**531 18th Century British Novel (3)** A study of the rise of the novel and its development in the 18th century. Defoe, Richardson, Fielding, Smollett, and Steme.

**533 Romantic Poetry and Prose (3)** The poetry and prose of the early 19th century with emphasis on the five major poets (Wordsworth, Coleridge, Byron, Shelley, and Keats) and three major essayists (Lamb, Hazlitt, and De Quincey).

**534 Victorian Poetry (3)** A study of Tennyson, Browning, Arnold, Hopkins, Swinburne, and Hardy.

**535 Culture and Society in the 19th Century (3)** A study of Victorian literature against its social and intellectual background.

**536 19th Century British Novel (3)** The British novel from Scott to Hardy.

**537 Modern British Novel (3)** A study of the British novel from 1914 to the present. Among the novelists to be studied are Conrad, Ford, Forster, Lawrence, Woolf, Waugh, Green, Murdoch, Spark, and Golding.

**538 Modern British Poetry (3)** A comprehensive study of the major British poets from 1890 to the present: Dowson, Housman, Hardy, Owen, Yeats, Eliot, Thomas, Lawrence, and Auden.

**539 Major 20th Century Irish Writers (3)** A comprehensive study of significant Irish writers of the 20th century: Yeats, Joyce, O'Casey, Synge, O'Connor, O'Faolain, Beckett, and Shaw.

**540 Joyce and Beckett (3)** Detailed critical analysis of Joyce's *Dubliners*, *A Portrait of the Artist as a Young Man*, *Exiles*, and *Ulysses*; Beckett's drama and novels.

**541 20th Century Drama (3)** Principal British and American playwrights from Shaw to Pinter and Albee.

◆**544 Seminar in English Literature (3)** Topic announced when offered.

**AMERICAN LITERATURE**

◆**47 American Literary Movements (3)** Major movements in the development of American

literature. Influence of leading writers on literary concepts, trends, and critical dicta. Topics announced when offered.

**548 Hawthorne and Melville (3)** A study of their works and representative literary criticism.

**549 Twain and James (3)** A study of their works and representative literary criticism.

**550 Computers and the Humanities (3)** Applications and demonstrations of the role and use of computers in the humanities.

**551 Hemingway and Faulkner (3)** The works of Hemingway and Faulkner and the literary relationship of these works.

**557 Major 20th Century American Poets (3)** A close study of several major, modern American poets.

**558 20th Century American Writers (3)** Major writers and literary movements from 1900 to the present. Topics announced when offered.

**560 Urbanism and the American Imagination (3)** A study of the impact of urbanism on American literature and art.

**562 Modern African-American Literature (3)** An intensive study in themes and trends in modern African-American literature.

**563 African-American Women Writers in America (3)** Writings from the Colonial period to the present. A survey of the forms of expression used by these writers and the themes of gender, race, and class that challenge and redefine the image of women in an American and African-American context.

◆**564 Seminar in American Literature (3)** Variable topics announced when offered.

**COMPARATIVE LITERATURE**

◆**565 Comparative Literature Seminar (3)** Studies in international, literary, and/or cultural relations, the characteristics and relationships of literary themes, types, and genres. Topics announced when offered.

**566 Comparative Literature: The Greek Myths (3)** The role of Greek myths and their treatment in Western literature.

**567 Computers in the English Curriculum (3)** Applications, demonstrations, and analyses of programs to facilitate the teaching of writing and literature and to aid the student in literary research.

**568 20th Century Women Poets (3)** The study of a significant number of modern women poets from Amy Lowell to Diane Wakoski. Discussion of commentary by women poets about the experience of writing poetry. Although the emphasis is on English and American poets, representatives from other cultures will be included.

**571 Colonialism and the 20th Century Novel (3)** An examination of the relationship of the colonialist theme and modernist techniques in the novel.

**LANGUAGE**

**575 Structure of Modern English (3)** A detailed analysis of the modern descriptive approach to the study of English grammar and how it compares with the traditional approach.

**576 English as a Second Language (3)** Implications of the nature of language in teaching



English to speakers of other languages. Methods and materials for teaching English as a second language. PREREQ: LIN 501 or permission of the instructor.

### **577 History of the English Language (3)**

Review of the major influences on the development of the English language. PREREQ: LIN 501 or LIN 503

**578 Modern English (3)** A study of the development of the English language from 1450 to the present (exclusive of American English).

### **579 Studies in American English (3)**

Historical processes in the development of American and British English. Regional and social dialects of American English. Usage and sociolinguistics.

### **580 English Language Workshop (1-4)**

Workshop to survey recent developments and newer concepts in English linguistics for teachers. Variable structure and credit by arrangement with individual school districts.

### **584 Old English Language and Literature (3)**

An introductory study of the language through a reading of selected religious and secular poetry and prose.

### **585 Middle English Language and Literature (3)**

An introductory study of the language (1150-1450) through a reading of selected texts (exclusive of Chaucer).

◆**589 Language Seminar (3)** Studies in English language and linguistics. Topics announced when offered. PREREQ: LIN 501 or the equivalent.

◆**590 Independent Study (1-3)** Research projects, reports, and specialized readings. PREREQ: Approval of instructor and coordinator of English graduate studies.

## **TEACHING SKILLS**

### **591 Modern Techniques for the Teaching of English (3)**

Techniques of teaching language arts, composition, and literature in the secondary school. Practice in planning and designing units and courses of study. Exploration into the latest research in teaching English.

### **592 Literature for the Elementary School (3)**

The content and approach of the literature program in the elementary school.

### **593 Literature for the Secondary School (3)**

An examination of the literary interests of the secondary school student. A discussion of the works of major writers who appeal to the teenage student.

### **594 Directed Studies in Composition and Rhetoric (3)**

Offers students systematic guidance and instruction in a specially formulated project involving scholarly or empirical research in composition

### **595 Teaching Composition (3)**

A survey of developments and research in composition. Focus on the writing process, grading and evaluation, case approaches to writing assignments, writing across the curriculum, and remedial and developmental writing

**596 Composition and Rhetoric (3)** Survey of rhetoric and composition theory. Frequent practice in writing.

### **597 Seminar for Master Teachers (6)**

### **599 Workshop in English (1-6)**

◆This course may be taken again for credit

workshop will focus on specific issues and problems in the teaching of English, and will introduce appropriate instructional materials and techniques.

**600 Tutoring Composition (3)** Theory and practice of teaching basic writing in the tutoring environment.

## **CREATIVE WRITING**

### ◆**509 Writing Seminar in the Novel I (3)**

A course in the writing and preparing of book-length manuscripts (novels, novellas, and "nonfictional" novels) with the intention of submission for publication. Also includes coverage of fictional aspects and techniques used in writing memoirs, biography, and current history.

◆**510 Writing Seminar in the Novel II (3)** A continuation of ENG 509.

◆**601 Creative Writing Seminar (3)** A specialized writing seminar. Topics announced when offered. Longer prose works, short story, fantasy/science fiction, narrative verse, lyric/meditative verse, etc. A portfolio is required at the end of the course.

◆**602 Creative Writing: Directed Studies (3)** A course of individual study for students who have completed two workshops in a single genre. Concentrated work in a special poetry or prose topic.

◆**605 Poetry Workshop I (3)** Experience in writing various types of poetry: traditional forms, narrative, lyric/meditative, etc. Readings in traditional and contemporary poetry and poetics. A final portfolio is required.

◆**606 Poetry Workshop II (3)** Extended work in poetic forms with additional emphasis on contemporary poetry in translation. A critical paper on contemporary poetry and poetics and a completed portfolio are required.

◆**608 Short Story Workshop (3)** Techniques of composing the short story with emphasis on its elements of form: point of view, diction, characterization, and dialogue. Readings in traditional and contemporary criticism and short stories. Completed portfolio of revised works is required.

◆**609 Short Story Workshop II (3)** Extended work in the short story form with opportunities for exploring more experimental forms of short fiction. Additional readings in short fiction and criticism. A critical paper on a contemporary short story writer is required.

## **M.A. ESSAY**

◆**620 M.A. Essay (3)** Required final extended paper (about 40 pages) written under the direction of an advisor. Further details available in the *Graduate English Studies Handbook*. Oral defense required.

## **SPECIAL PROGRAM**

### **PENNSYLVANIA WRITING PROJECT**

Symbol: PWP

The courses described below are intended to be taken primarily by secondary school teaching professionals who are seeking to enhance their writing instruction capabilities while earning graduate credit. Generally, these courses CANNOT be applied toward a master's degree in English. The ONLY exception to this rule

involves degree candidates with a concentration in composition and rhetoric

**501 The Writing Process (1)** A practical introduction to the writing process approach to teaching writing. Permission of instructor required.

### **502 Strategies for Teaching Writing (2-3)**

This basic course is designed to familiarize teachers of writing with successful practices and related research and theory in the field. Permission of instructor required

### **503 Strategies for Teaching Writing II (3)**

Practical and research-based skills of pre-writing, writing conferences, revision, editing, and evaluation. PREREQ: PWP 502 or PWP 510 and permission of instructor required.

### **504 Holistic Assessment of Writing (1)**

Theory and practice of rapid and reliable assessment of large numbers of writing samples as used in schools and colleges. Permission of instructor required.

### **505 Writing in the Content Areas (1)**

Participants will explore ways of motivating students to write about academic areas, design effective assignments, and use writing process methods to improve learning in all subjects. Topics include learning-centered writing, evaluation, and classroom management of writing. Permission of instructor required

### **506 Computers and Writing (Beginning) (1)**

Microcomputer applications at all stages of the writing process. Basic awareness, demonstrations, and hands-on experience will be emphasized. Permission of instructor required.

### **507 Computer and Writing (Intermediate I) (2)**

An introduction to computer programs useful at all stages of the writing process and to ways that teachers can use, develop, and evaluate computer-assisted instruction (CAI) in writing. Permission of the instructor

### **508 Computers and Writing (Intermediate II) (3)**

A practical and theoretical overview of the field, with demonstrations of computer courseware and hands-on experience in prewriting and planning, word processing, revising, editing, skill-building, evaluation, and classroom management. Permission of instructor required.

### **509 Computers and Writing (Advanced) (4)**

Covers pertinent points of composition training. Stages in the composing process are related to software packages and computer-assisted teaching techniques. Theoretical and practical questions will prepare teachers of writing to incorporate useful computer assistance into their classrooms and to offer demonstrations to other teachers. Permission of the instructor required

**510 Writing, Reading, and Talking Across the Curriculum (3)** Rationale and strategies for critical language experiences in all subjects. Supports PCRP2 state curriculum framework. Permission of instructor required.

**511 Writing Assessment (3)** Large-scale and classroom writing assessment, implications for writing instructions. Permission of instructor required

**512 Teacher-Research Seminar (3)** Individual research projects for classroom studies of students as writers. Permission of instructor required

### **513 PCRP2 Seminar on Writing and**

**Thinking Across the Curriculum** Critical exploration of Pennsylvania state curriculum framework for language and learning. PREREQ: PWP 510 and permission of instructor required.

**515 Workshop in Administering Writing Programs** Creating and maintaining successful writing and language arts programs. Permission of instructor required.

**517 Workshop in Writing Assessment** Different assessment models and their relation to instruction, with information from the Pennsylvania Writing Assessment. Permission of the instructor required.

**597 Seminar for Master Teachers (6)** Participants develop advanced skills in the teaching of writing, receive training as in-service "teacher/

consultants," and develop relationships with other writing teachers who seek to improve their teaching and writing. Permission of instructor required.

**599 Workshop in English (1-6)** Topic varies. Each workshop will focus on specific issues and problems in the teaching of writing and will introduce appropriate instructional materials and techniques. Permission of instructor required.

## Foreign Languages

Room 109 Main Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2700

Mr. Gougher, *Chairperson*

Dr. Patton, *Assistant Chairperson and Coordinator of Graduate Studies*

### FRENCH

#### ASSISTANT PROFESSORS

Robert Greene, M.A., *University of Pennsylvania*  
Rebecca Pauly, D.M.L., *Middlebury College*

### GERMAN

#### ASSOCIATE PROFESSOR

Ronald L. Gougher, M.A., *Lehigh University*

#### ASSISTANT PROFESSORS

Ralph A. Eisenstadt, M.S., *University of Illinois*  
Stephen G. Gilmour, Ph.D., *University of Minnesota*

### LATIN

#### ASSOCIATE PROFESSOR

Erminio Braidotti, Ph.D., *University of Pennsylvania*

#### INSTRUCTOR

John P. Rosso, M.A., *University of Pennsylvania*

### SPANISH

#### ASSOCIATE PROFESSORS

Erminio Braidotti, Ph.D., *University of Pennsylvania*  
Jorge Escorcia, M.A., *Boston University*  
Stacey Schlau, Ph.D., *City University of New York*  
Jerome M. Williams, Ph.D., *Yale University*

#### ASSISTANT PROFESSORS

Celia Esplugas, Ph.D., *University of Toledo*  
Constance Garcia-Barrio, Ph.D., *University of Pennsylvania*  
Andrea Varricchio, Ph.D., *Temple University*

## LANGUAGE AND LINGUISTICS

### PROFESSOR

Philip D. Smith, Jr., Ph.D., *Ohio State University*

The Department of Foreign Languages offers two degree programs, one leading to the Master of Education in French, German, Latin, or Spanish, and the other to the Master of Arts in French or Spanish.

The department also cooperates in the offering of an interdisciplinary program leading to the Master of Arts in

◆ This course may be taken again for credit

Teaching English as a Second Language. (See Teaching English as a Second Language.)

### MASTER OF EDUCATION IN FRENCH, GERMAN, LATIN, OR SPANISH

(34 semester hours)

The M.Ed. program requires Methods and Materials of Research in Second Language Education (LAN 500), Techniques of Second Language Teaching (LAN 503), and 18 semester hours in the area of concentration. The concentration may be designed to the student's particular interest and needs, but in French, German, or Spanish, it must include one course each from Groups A, B, C, and D. In Latin, the 18-hour concentration is developed from Groups A and B, under advisement. Majors in any of the languages may also elect from Courses Common to All Languages (see below) for the concentration.

The Department of Foreign Languages has approved the following undergraduate courses for graduate credit when scheduled with the approval of the student's advisor and/or department chairperson: FRE 401 to 411, inclusive; GER 401 to 412, inclusive; LAT 401-406 and 410-412, inclusive; RUS 401-403 and 410-412, inclusive; SPA 401-406, inclusive, and 410, 414, 456, and 457.

At least 12 semester hours of course work in education are required. (See page 42.)

#### FRENCH

##### Group A

FRE 510, 511, 512, and 513

##### Group B

FRE 501, 514, and 515

##### Group C

FRE 516 and 520

##### Group D

FRE 520 and 521

#### LATIN

##### Group A

LAT 503, 511, 512, and 514

##### Group B

LAT 515, 521 through 531, and 535 and 536

#### GERMAN

##### Group A

GER 513 and 514

##### Group B

GER 515

##### Group C

GER 516, 517, 518, and 520

##### Group D

◆ GER 519

#### SPANISH

##### Group A

SPA 510, 511, 512, 513, and 514

##### Group B

SPA 520, 521, 522, 523, 524, and 525

##### Group C

SPA 530, 532, 533, and 534

##### Group D

SPA 540, 542, 543, 544, 545, and 546

### MASTER OF ARTS IN FRENCH OR SPANISH

(30 semester hours)

The M.A. programs in French or Spanish provide for either a thesis or nonthesis option. Both require 21 semester hours as follows: for Spanish, SPA 511 and six hours from each of Groups B, C, and D above; for French, 21 semester hours from Groups A, B, C, and D above. The thesis program includes FRE, or SPA, or GER 510 (six

hours) and an additional elective (three hours) in the area of concentration. The nonthesis option includes nine hours of electives in the area of concentration.

The Department of Foreign Languages has approved the following undergraduate courses for graduate credit when scheduled with the approval of the student's advisor and/or department chairperson: FRE 401 to 411, inclusive; GER 401 to 412, inclusive; LAT 401-406 and 410-412, inclusive; RUS 401-403 and 410-412, inclusive; SPA 401-406, inclusive, and 410, 414, 456, and 457.

## COURSE DESCRIPTIONS

### COURSES COMMON TO ALL LANGUAGES

Symbol: LAN

**500 Methods and Materials of Research in Second Language Education (3)** Techniques of research in foreign language education, including sources, design, interpretation, evaluation, and reporting of data.

**502 Second Languages in the Elementary School (3)** Problems in teaching second languages in the elementary school. Curriculum design, bilingual education, classroom techniques, articulation, materials, and testing. Preferably, LIN 501 or equivalent should precede LAN 502.

**503 Techniques of Second Language Teaching (3)** Advanced course in recent theoretical bases, methods for teaching beginning and advanced levels, curriculum design and evaluation. PREREQ: LIN 501 or equivalent.

**504 Use of Media in Language Teaching (3)** Role of media in language instruction including the tape recorder, language laboratory, television, and the computer.

**505 Introduction to Bilingual/Bicultural Education (3)** Introduction to history, philosophy, current status, and future directions of bilingual bicultural education. Survey of materials, tests, techniques, instructional processes, and instructional patterns. Overview of testing, placement, and pupil evaluation.

**511 Roman Civilization (3)** Roman civilization and its influences on Europe.

**550 Seminar in Methods and Materials of Research in Language and Literature (3)** The principal tools of research in the field of foreign language and literature. Methods of conducting and reporting research, emphasizing correctness of form and mechanics of scholarly writing.

**560 Directed Studies (3)** To provide an opportunity for students to pursue areas of study not regularly provided by the department. Focus of course to be announced when offered.

**580 Seminar in Second Language Education (1-4)** Specialized workshop seminar devoted to a particular area of foreign language education.

**585 Institute in Second Language Education (4-8)** In-depth study of a particular area of foreign language education.

**590 Independent Study (1-3)**

**600 Research Report (1-2)**

◆ This course may be taken again for credit

Electives for both options may also be from courses common to all languages. (See above.) For the M.A. program, LAN 550 is strongly recommended.

The candidate for the M.A. must pass a reading examination in a second foreign language or must have taken and passed at least one graduate-level course in a second foreign language.

Comprehensive examinations are required for both the Master of Arts and the Master of Education.

## 610 Thesis (6)

See also Linguistics (LIN)

## FRENCH

Symbol: FRE

**501 Commercial French (3)** A study of French economic and business systems, with extensive practice in business correspondence.

**510 French Theater (3)** Principal French dramatists analyzed against the social, political, literary, and critical backgrounds of their age.

**511 Modernism in French Literature (3)** Close consideration of some prime innovative texts of fiction, poetry, film, and polemic as manifestations of the spirit and aesthetic of modernism.

**512 French Narrative (3)** A study of prose texts, their ethos, and their narrative techniques, from the epics and *contes* of the Middle Ages to the experimental works of the late 20th century.

**513 French Poetics (3)** An intensive survey of French poetry, its theory and practice, using models drawn from the whole tradition, from Villon to Bonnefoy.

**514 Contemporary France (3)** A study of France since 1945, with emphasis on current events and social changes.

**515 French Civilization (3)** A study of France since 1789, with emphasis on social, political, economic, and educational institutions.

**516 Writing Literary Criticism: Theory and Practice (3)** Study of various fields of literary theory, including structuralism, semiotics, Marxism, narratology, psychoanalytic criticism, and deconstruction. Techniques of textual interpretation.

**520 Topics in French Literature and Language (3)** Topics courses will vary by semester and instructor, and may include titles such as genre studies, film study, women writers, francophone writers, the study of literary periods or movements, and structural and applied linguistics.

**521 Translation Techniques (3)** A theoretical and practical study of modes of lexical and syntactic transposition, from L1 to neutral zone to L2. Extensive practical exercise in diverse types of translation.

## GERMAN

Symbol: GER

**513 Phonetics and Advanced Oral Practice (3)** The sounds, forms and structure of modern standard German, using recorded materials and selected texts.

## 514 Advanced Grammar and Stylistics (3)

Stylistic qualities of modern German, analyzed in selected texts. Oral and written drill.

**515 German Civilization (3)** Social structure of Germany; evolution of its institutions, German achievements in the arts.

**516 The Novelle (3)** The German short story from Goethe to the present, including the German Feuilleton and the post-World War II writers.

**517 German Lyric Poetry (3)** Major representative poets of the 19th and 20th centuries.

**518 Contemporary German Literature (3)** Post-World War II literature, including poetry and prose, along with appropriate literary criticism.

◆ **519 Seminar (3)** Small-group study of relevant topics in German literature and philology.

**520 Age of Goethe (3)** Works of Goethe, Schiller, and other contemporaries. Critical works dealing with the life of Goethe, Schiller, and others.

## LATIN

Symbol: LAT

**503 Techniques of the Teaching of Latin (3)** Survey and analysis of texts and other materials for teaching Latin. Recent methods for elementary and secondary levels. Curriculum for the secondary level.

**511 Comparative Grammar and Syntax of Greek and Latin (3)** The relation of Greek to Latin within the Indo-European family of languages. Survey of the external histories of Greek and Latin. Greek and Latin phonology and morphology with references to principles of syntax.

**512 History of the Latin Language (3)** Development of the Latin language from the earliest inscriptions to the ninth century A.D., with some consideration of the prehistoric language and people in Rome.

**514 Advanced Latin Prose Composition and Translation (3)** Intensive review of Latin syntax, with translation of English passages into Latin and vice versa.

**515 Seminar in Greek and Roman Civilization (3)** A study of literary texts and archaeological documents illustrative of the Greek mind and/or Roman genius.

**521 Cicero's Philosophical Essays (3)** Studies in the *Somnium Scipionis*, *Tusculan Disputations*, *De Natura Deorum* and *De Officiis* with reference to Cicero's political theory and practice.

**522 Virgil: Eclogues and Georgics (3)** Studies in the themes and methods of Virgil's *Eclogues* and *Georgics*.

**524 Comedies of Plautus (3)** Origins of "comedy of matters"; study of Plautian comedy and its influence on later writers of comedy.

**525 Latin Metre and Verse (3)** The formal structure and development of Latin verse from its beginnings to the 20th century. Illustrative readings in early, classical, medieval, and modern Latin poetry.

**526 Greek and Latin Epic (3)** The Greek epic from Homer to Apollonius of Rhodes, and the Latin epic from Naevius to Virgil. Readings from the classical epics.

**527 Roman Historiographers (3)** Selections from Sallust, Caesar, Livy, Tacitus, and Suetonius. Origin, development, and influence of Roman historiography.

**528 Roman Satire (3)** History of Roman satire and the development of Lucilian satire. A comparative study of the satires of Horace, Persius, and Juvenal.

**529 The Latin Novel (3)** Emergence and development of the Latin novel. Readings in Petronius' *Cena Trimalchionis*, Seneca's *Apocolocyntosis*, the Pompeian Inscriptions, and Apuleius' *Metamorphoses*.

**530 Medieval Latin Literature (3)** Latin poetry and prose from the 14th to the 17th centuries, with emphasis on the acquisition of a good reading knowledge of medieval Latin in different periods and styles.

**531 Latin Epigraphy (3)** Latin inscriptions from the earliest period to the eighth century A.D. A study of the development of the Latin language.

**535 Seminar in Interpretation of Latin Literature (3)** Study of various modern approaches to Latin literature. Analysis of selected passages or themes from selected authors.

**536 Literary Criticism in Antiquity (3)** Study of selected authors or works with reference to both ancient and modern (e.g., Horace and Quintilian) criticism and interpretation.

## SPANISH

Symbol: SPA

**510 Advanced Spanish Phonetics (3)** Theo-

retical and practical approach to phonology, phonetics, and phonetic transcriptions. Regional and dialectal variations.

**511 Romance Philology (Spanish) (3)** The development of Old Spanish from Vulgar Latin and Protoromance, with analysis of Spanish phonology, morphology, and syntax. Readings in Old Spanish.

**512 Advanced Spanish Grammar and Stylistics (3)** An informal, rapid review of Spanish grammar, with emphasis on problems fundamental to the American classroom. Exercises include idiomatic expression, various levels of style, and translation.

**513 Advanced Oral Spanish (3)** An intensive course for teachers and professionals seeking improvement in oral Spanish. Emphasis on vocabulary and idiom acquisition via discussions, readings, and reports.

**514 Spanish Civilization (3)** Major philosophical and artistic contributions of the Hispanic world to Western civilization. Spain's social and economic institutions, and the character of her people as reflected in the arts.

**520 Cervantes (3)** Life and works of Miguel Cervantes Saavedra: *Novelas ejemplares*, *Ocho comedias y ocho entremeses*, *La Numancia*, *La Galatea*, all of which lead to the study of the meaning, philosophy, and influence of *Don Quixote*.

**521 Juan Ruiz, Arcipreste de Hita (3)** The *Libro de Buen Amor* as a major work in Spain's poetic development.

**522 Lope de Vega (3)** The Spanish *comedia* viewed as an expression of the Spanish people. The popular and national elements of this theater. Lope de Vega as the chief innovator and leading figure of the first half of the Golden Age.

**523 Galdós (3)** Benito Perez Galdos: his novels of social reform, enlightenment, and conversion.

**524 Valera (3)** Juan Valera's psychological novels, set in 19th century Andalusia.

**525 Unamuno (3)** The philosophical ideas of Unamuno studied in his critical essays, plays, and novels.

**530 "Spanish Comedia" of the Golden Age (3)** Survey of the *comedia* before Lope de Vega; the contributions of Lope de Vega; Tirso de Molina and Ruiz de Alarcon; the Baroque theater of Pedro Calderon de la Barca.

**532 The Picaresque Novel (3)** The picaresque novel as an indigenous creation of Spain; *Lazarillo de Tormes*, *Guzman de Alfarache*, *Vida del Buscon*, the picaresque novel as a tradition in Spain and an influence in other literatures.

**533 The Generation of 1898 (3)** The revitalizing forces which took hold in the late 19th century, and a study of the works of Unamuno, Azorin, Menendez Pidal, Pio Baroja, Valle Inclan, Benavente, Martinez Sierra, and Ruben Dario.

**534 Spanish Lyric Poetry (3)** Spanish lyric poetry, with emphasis on early forms, the Renaissance Italianate forms, and the blossoming of lyric poetry in the 19th and 20th centuries.

**540 Medieval Spanish Literature (3)** The *mester de juglaria* and the *Poema del Cid*, early related epics and the *mester de clerecia*, Spain's early historical chronicles. Beginnings of the Spanish theater.

**542 Spanish Romanticism (3)** The Spanish Romantics and *costumbristas*, Duque de Rivas, Espronceda, Gomez de Avellaneda, Becquer, Larra, and Mesonero Romanos. The dramatic novels of Pardo Bazan, Palacio Valdes, Clarin, and Galdos.

**543 Contemporary Spanish Theater (3)** The "Ibsenite" and social dramas of the late 19th century, represented by the plays of Lopez de Ayala, Jose Echegaray, and Galdos. The transition period headed by Martinez Sierra and the brothers Quintero. Spain's modernistic drama, exemplified by Federico Garcia Lorca and Alejandro Casona.

**544 Masterpieces and Movements in Spanish Literature (3)** A seminar on the development of Spanish thought and artistic expression through selected masterpieces of literature and art.

**545 The Latin American Novel (3)** The development of the novel in Latin America. The colonial period, the period of independence, the romantic period; realism, modernism, *criollismo*, and naturalism.

**546 The Black in Spanish American Literature (3)** The characterization of blacks in Spanish-American literature, and the political and social context of their portrayal.

**556 Seminar I (3)**

**557 Seminar II (3)**

## Geography and Planning

207 Ruby Jones Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2746

Dr. Rengert, *Chairperson and Coordinator of Graduate Studies*

Mr. Bielski, *Coordinator of Urban and Regional Planning in M.S.A.*

## PROFESSORS

Arlene C. Rengert, Ph.D., *University of Pennsylvania*

John C. Tachovsky, Ph.D., *University of Cincinnati*  
Wesley W. Thomas, Ph.D., *University of Cincinnati*

## ASSOCIATE PROFESSORS

F. Robert Bielski, M.A., *University of Illinois, A.I.C.P., American Planning Association*  
Charles W. Grassel, M.S., *University of Pennsylvania*

## ASSISTANT PROFESSORS

George W. Fasic, M.S., *Columbia University; A.I.C.P. (Director, Chester County Planning)*  
Joan Welch, Ph.D., *Boston University*

The Department of Geography and Planning offers the Master of Arts in geography and the Master of Science in Administration, with a concentration in urban and regional planning. The latter is an interdisciplinary degree described under Master of Science in Administration. The Master of Arts in geography is designed to develop skills and expertise useful in solving society's problems in areas such as land planning and management, conservation of resources, and location of commerce and industry. It also prepares students for entrance into Ph.D. programs in geography, and in social studies education.

### MASTER OF ARTS IN GEOGRAPHY

(33 semester hours)

- 1. Required Courses** 9 semester hours  
GEO 505, 509, and 581
- 2. Thesis** 6 semester hours  
GEO 610
- 3. Elective Courses** 18 semester hours  
Selected under advisement from geography, geology, mathematics, statistics, computer science, environmental health, or other appropriate disciplines.
- 4. Oral examination in defense of thesis (required)**

### MASTER OF SCIENCE IN ADMINISTRATION

Concentration in Urban and Regional Planning  
(36 semester hours)

- 1. Administration Core (required)** 30 semester hours  
ADM 501, 502, 503, 504, 505, 506, or 507
- 2. Urban and Regional Planning Core (required)**  
ADM 500 Methods and Materials of Research (3)  
GEO 525 Urban and Regional Planning: Theory and Practice (3)
- 3. Urban and Regional Planning Electives** 12 semester hours  
(selected under advisement), including  
GEO 502, 505, 506, 507, 509, 521, 524, 526, 527, 530, 590, 610, and 615  
ADM 600, 612  
PSC 542 and 544
4. Each student in this concentration will develop with the graduate coordinator a tailored contract of courses meeting the needs of the student. The individualized contract will address the background and career goals of the student.
5. Comprehensive examination (written) in concentration is required. The examination will be based on a selected bibliography of key works in the concentration. The bibliography will be provided at the time the student is admitted to the program.

### COURSE DESCRIPTIONS

#### GEOGRAPHY

Symbol: GEO

◆**502 Topical Seminar (3)** Special topics in geography or planning not offered under existing, regularly offered courses.

**505 Map Design (3)** Methods and techniques of map design. Presentation of statistical data in map form. PREREQ: Consent of instructor

**506 Environmental Hazards and Site Planning (3)** This course examines aspects of the physical environment that must be considered when planning any site for urban, industrial, or suburban activity.

**507 Maps and Aerial Photographs (3)** Designed to improve map and photo interpretation skills. Emphasis on increased understanding of U.S.G.S. quadrangles, and special-purpose statistical maps.

**509 Quantitative Methods (3)** Fundamental statistics, methods, and techniques applied to geographic research and decision making, such as urban and regional planning.

**521 Suburbanization and Land Development (3)** Component systems and functional operations of urban/suburban communities, including ecological and demographic aspects. Emphasis on organization, development, change, and problems of communities.

**524 Population Processes (3)** Characteristics and distribution of world populations are studied. The dynamic processes of population change (mortality, fertility, and migration) are examined.

**525 Urban and Regional Planning (3)** Application of community-planning theories and methods to designated urban and regional systems.

**526 Metropolitan Systems and Problems (3)**

◆This course may be taken again for credit

Urbanization processes and problems; urban systems in the expanding metropolitan and regional setting; present and proposed efforts to solve urban problems.

**527 Planning Law and Organization (3)** An insight into the role of federal, state, and local governments in instituting, executing, and judicially reviewing laws and regulations pertaining to land uses. Emphasis on the legal organization of the planning process, particularly at the local level. Major land-use court cases are presented and reviewed.

**530 Demographic Analysis (3)** A course to develop skills in basic demographic research, emphasizing the uses and limitations of data sources, and the understanding and interpretation of specific analytic methods for population analysis

**540 Geography of the United States (3)** A regional study of the United States, emphasizing its physical geography, settlement, agriculture, demography, and industrial activity.

**544 Geography of Latin America (3)** Regional geography of Latin America. Its physical base, settlement, agriculture, demography, and manufacturing are considered

**545 Geography of Europe (excluding the U.S.S.R.) (3)** Regional study of Europe. Influences of environmental factors, such as climate, landforms, and soils on the economic, social, and political condition of European nations

**546 Geography of the Soviet Union (3)** European and Asiatic U.S.S.R. and its satellite nations. Elements of the environmental and regional divisions in relation to resource base and economic political objectives

◆**571 Conservation Workshop (3)** A survey of applied resource conservation, resource management, and environmental problem-solving practices

◆**572 Seminar in Resource Management (3)** Applied research problem solving for resource management and environmental issues designed for an individual student or team-study basis.

**581 Seminar in Geography (3)** Modern geographic thought with emphasis on contributions of American geographers and their most recent views. Introduction to geographic research.

**585 Geography Field Methods (3)** An advanced field course that includes urban and land-use studies. Use of field methods, mapping, and data collection for geographical reports

**590 Independent Studies in Geography (3)** Research projects, reports, and readings in geography. PREREQ: Approval of discipline graduate coordinator.

◆**610 Thesis (3 or 6)** A thesis is developed on a research problem for which the student develops a theory, proposition or hypothesis, and investigates available information on the subject

**615 Internship in Urban and Regional Planning (3 or 6)** On-the-job experience in the application of theory, execution of substantive research, and provision of service with professional agencies at selected off-campus locations

In addition to the above GEO courses, the following ADM courses are offered especially in connection with the Master of Science in Administration.

**500 Methods and Materials of Research (3)** Logic of scientific methodology; research design construction. Stress on hypothesis development and testing, data collection, measurement problems, theory application

◆**600 Research Report (3)**

**610 Thesis (3)**

**612 Internship (3-6)** Intensive field placement in organizations under faculty guidance/supervision. Precontracted learning objectives

## Geology and Astronomy

470 Schmucker Science Center  
West Chester University  
West Chester, PA 19383  
(215) 436-2727/ 2788

Dr. Johnson, *Chairperson*

Dr. Pritchard, *Coordinator of Graduate Studies*

### PROFESSORS

Seymour S. Greenberg, Ph.D., *Indiana University*

George Reed, Ed.D., *University of Pennsylvania*

John Stolar, Ed.D., *Pennsylvania State University*

### ASSOCIATE PROFESSORS

John E. Ehleiter, Ed.D., *Pennsylvania State University*

Hubert E. Harber, M.A.T., *Brown University*

Allen H. Johnson, Ph.D., *Case Western Reserve University*

Sandra F. Pritchard, Ph.D., *University of Oregon*

Arthur R. Smith, Ed.D., *University of Pennsylvania*

C. Gil Wiswall, Ph.D., *University of Montana*

### ASSISTANT PROFESSORS

Richard M. Busch, Ph.D., *University of Pittsburgh*

The Department of Geology and Astronomy, in cooperation with the Department of Chemistry, offers a program leading to the Master of Arts degree in physical science. (See Physical Science Program.)

For the benefit of in-service teachers and other employed persons, West Chester schedules most of its graduate classes during late afternoons and evenings. Most of the students are part time; that is, they take less than nine credits per semester.

### COURSE DESCRIPTIONS

#### GEOLOGY and ASTRONOMY

Symbol: ESS, except as noted

It is assumed that for all geology courses, ESS 101 is a prerequisite, and for all astronomy courses, ESS 111 is a prerequisite. In addition, any course may be taken with permission of the instructor

**502 Mineralogy (3)** Properties, identification, occurrence, and crystallography of the more important minerals. Fundamentals of mineral composition and structure.

**503 Principles of Physical Geology (3)** Composition of the earth (minerals and rocks) and earth processes (weathering, erosion, metamorphism, volcanism, and diastrophism)

**504 Historical Geology (3)** Geologic history of the earth and the evidence for this history, including discussion of the formation of the earth, atmosphere, oceans, and the historical evolution of land, air, and sea and the life that inhabits these environments. Examination of fossils and geologic maps. PREREQ: BIO 110, CHE 104, and CRL 104.

**505 Petrology (3)** Origin, classification, and identification of rocks. Hand specimen examination. PREREQ: ESS 502.

**506 Quaternary Geology (3)** An investigation of the most recent geologic period, including the records of climate change, geomorphology, glacial history, stratigraphy, sea level changes, and faunal evolution, that have accompanied the continental glaciations of the last two million years. Includes spring break field trip.

**507 Geology of the Solar System (3)** The geology, origin, and properties of planets, comets, asteroids, moons, and meteorites; planetary exploration. PREREQ: One introductory course in astronomy and one in geology

**508 Field Geology (1-3)** Practical experience in techniques and tools of the field geologist. PREREQ: An introductory geology course.

**510 Intermediate Mineralogy (3)** How the petrographic microscope, x-ray diffraction, and

the electron microscope are used to identify minerals. PREREQ: ESS 502.

**511 General Astronomy (3)** Motions of bodies in the solar system; astronomical coordinates; measurement of time, use of telescopes.

**ESL 512 Historical Geology Lab (0)**

**513 Principles of Geochemistry (3)** Migration and distribution of the chemical elements within the earth; chemistry of the lithosphere, hydrosphere, and biosphere; chemical changes throughout earth history; the geochemical cycle.

**518 Structural Petrology (3)** Deformation mechanisms, rheology, theory of strain: formation and evolution of tectonic features (cleavage, folds, mountain belts, etc.). Lab work involves detailed analysis using light and electron microscopes, and mathematical manipulation both with and without computers. PREREQ: MAT 161 and, 162, CHE 104, and permission of instructor.

**520 Structural Geology (3)** An introduction to structural analysis: a study of the deformational features of the earth's crust and the forces responsible for producing them. PREREQ: 501 and 505, or permission of instructor

**523 General Geologic Field Studies of Southeastern Pennsylvania (3)** Occurrence, relationships, and geologic history of the rocks, minerals, and soils of this area, studied at representative locations.

**524 History of Geology (1)** Outstanding individuals and their contributions to geology.

**525 Tectonics (3)** Kinematics and consequences of plate motion, origin of orogenic belts, and identification and analysis of modern counterparts: accretionary wedge, magmatic core, and thrust systems. Lab work involves vector analysis of plate motion and palinspastic reconstructions of thrust systems. PREREQ: ESS 305 and 320.

**526 Economic Geology (3)** The geologic origin, accumulation, and distribution of metalliferous economic mineral deposits. Also investigates exploration methods. PREREQ: ESS 503.

**ESL 527 Electron Microscopy I (3)** A one-semester lecture/laboratory course in theory operation and applications of electron beam technology in scientific research. Course scheduled on student-demand basis.

**528 Engineering Geology (3)** The application of geological factors to the planning and design of engineered construction. PREREQ: ESS 503.

**ESL 529 Electron Microscopy II (3)** A one-semester lecture/laboratory course in advanced theories operation and applications of electron microscopy in scientific research. Emphasis on individual projects. PREREQ: ESL 527. Course scheduled on student-demand basis.

**530 Principles of Oceanography (3)** Geology of the ocean floor, water movements, chemical characteristics of sea water, and vertical and horizontal distribution of plants and animals. Brief history of oceanography.

**531 Introduction to Paleontology (3)** Identification, paleobiology and importance of fossils; paleoecology, and evolution. PREREQ: ESS 101, 203, or 503.

**536 Environmental Geology (3)** The application of geological information to human problems encountered in the physical environment, such as flooding, earthquakes, volcanic activity, hydrology, and land use. PREREQ: ESS 503.

**539 Hydrology (3)** The factors that control the distribution, occurrence, and recoverability of groundwater; techniques for locating and estimating recoverable water; groundwater pollution and waste water disposal. PREREQ: MAT 162, CHE 104, and CRL 104.

**540 Introduction to Meteorology (3)** Composition and properties of the atmosphere and principles that influence weather conditions.

**541 Geology and Geography of Plants (3)** Study of paleo and modern spatial characteristics and distributions of vegetation and their relationships to the geologic-, geographic-, climatic-, and man-induced features of the environment.

**542 Geophysics (3)** Methods and techniques



of physics applied to interpreting the internal structure and composition of the earth.

PREREQ: MAT 162, PHY 180, or PHY 140.

**543 Geomorphology I (3)** Lectures will present the constructional and degradational processes that have shaped present landforms and are constantly modifying those landforms. Laboratories will focus on the interpretation of topographic maps and the use of remote sensing materials.

**544 Geomorphology II (3)** A continuation of the study of earth surface processes. Laboratories will focus on the interpretation of topographic maps and the use of remote sensing materials. PREREQ: ESS 543.

**545 Regional Geomorphology of North America (3)** Lectures will direct the student through a systematic analysis of the surface configurations and landform regions of North America; the processes at work on these configurations in the past and at the present; and man's relationships to these features and processes. Laboratories will emphasize these features, processes, and relationships through the use of topographic maps and remote sensing materials. Field projects will be included. PREREQ: ESS 543 and 544.

**546 Geology of Petroleum (3)** The characteristics of geologic origin and occurrence, migration, and accumulation of petroleum. Includes a study of reservoir fluids, traps, and dynamics and investigation of exploration methods. PREREQ: ESS 503.

**550 Sedimentology and Stratigraphy (3)** The nature and origin of stratified deposits; the temporal-spatial relationships among stratified deposits, and other geologic and biologic phenomena; and the reconstruction of paleoenvironments. PREREQ: ESS 503 and 504.

**551 Stellar Astronomy (3)** Properties of stars, unusual stars, interstellar matter, and stellar evolution; distribution and motions of the home and other galaxies. PREREQ: Any general descriptive astronomy course.

**553 Nautical Astronomy (Celestial Navigation) (3)** A study of the technical skills of celestial navigation, covering topics such as celestial coordinates, principles of time, and the navigational triangle, lines of position, and star identification. Includes lab. PREREQ: Any algebra and trigonometry course.

**554 Archeoastronomy (3)** A study of ancient

astronomical skills, including those of the Babylonians, Egyptians, Greeks, Chinese, Maya, Incas, Aztecs, and the North American Indians. PREREQ: Any descriptive astronomy course.

**555 Intermediate Astronomy (3)** An analytical and qualitative analysis of selected astronomical phenomena. Such topics as telescope optics (including photographic and photoelectric attachments), lunar and planetary orbits, stellar motions and magnitudes, and galactic classifications and distances. Two hours of lecture. Two hours of laboratory. PREREQ: Any descriptive astronomy course.

**562 History of Astronomy (3)** The development of astronomical theories from Greek times to the 20th century. PREREQ: Any descriptive astronomy course.

**575 Introduction to the Planetarium (3)** Principles and use of the planetarium in teaching. Specific projects are assigned. PREREQ: Any general astronomy course.

**591 Independent Study (1-3)** An investigation by the student. PREREQ: Permission of department.

**594 Geology of the NW National Parks (4)** This course includes a field trip to the national parks in South Dakota, Wyoming, Montana, Idaho, northern Utah, and Colorado. The purpose of the course is to look at the geologic features of the National Parks in these states and to develop an appreciation of the geology and geologic history of the region. PREREQ: Permission of instructor.

**595 Geology of the SW National Parks (4)** The course includes a field trip to the National Parks in New Mexico, Arizona, southern Utah, and Colorado. The purpose of the course is to look at the geologic features of the National Parks in these states and to develop an appreciation of the geology and geologic history of the region. PREREQ: Permission of instructor.

◆**600 Thesis Research I (3)** A theory is developed on a research problem for which the student produces a thesis. PREREQ: Permission of advisor.

◆**601 Thesis Research II (3)** A theory is developed on a research problem for which the student produces a thesis. PREREQ: Permission of advisor.

◆**602 Directed Research I (3)** A theory is developed on a research problem for which the

student produces a graduate paper. PREREQ: Permission of advisor.

◆**603 Directed Research II (3)** A theory is developed on a research problem for which the student produces a graduate paper. PREREQ: Permission of advisor.

**650 Institute in Planetarium Education (1-3)** A course that provides the novice and inexperienced planetarium teacher with fundamental concepts that can be taught in the planetarium; intensive study of effective planetarium teaching methods, and supervised training and practice in the operation, use and maintenance of the planetarium. PREREQ: Permission of instructor (Summer only.)

**Any of the following dual-level courses (but not more than six semester hours of credit) may be taken for graduate credit toward the degree:**

**ESS 555 Intermediate Astronomy**

**ESS 575 Introduction to the Planetarium**

(All are three-credit courses. See also Science Education.)

## SCIENCE EDUCATION

Symbol: SCE

**500 Modern Trends in Science Education (3)** Introduction to current research in science education; a critical review of the literature.

**501 Modern Trends in Teaching Earth and Space Science (3)** Recent materials and techniques in secondary school earth and space science.

**510 Workshop in Secondary School Curricula (3)** Study of one of the commonly used science programs for secondary schools. The selected program is announced in advance.

**595 Elementary School Science Instruction (3)** A course to improve the science content backgrounds of elementary-school teachers and administrators.

**PHS 502 Modern Trends in Teaching Physical Science (2)** Materials and techniques in secondary school physical science.

## SCIENCE OFFERINGS DESIGNED FOR ELEMENTARY SCHOOL TEACHERS

**PHS 571 Physics for the Elementary Teacher**

**SCE 595 Elementary School Science Instruction**

◆ This course may be taken again for credit.

## Health

207 South Campus

West Chester University

West Chester, PA 19383

(215) 436-2931

Dr. McConatha, *Coordinator of Graduate Studies*

## PROFESSORS

John D. Lemcke, Ed.D., *Temple University*

Dorothy R. Nowack, Ph.D., *University of Maryland*

Robert P. Nye, Ed.D., *Temple University*

Franklin Young, Ph.D., *University of Florida*

## ASSOCIATE PROFESSORS

Jeffrey E. Harris, D.H.Sc., *Loma Linda University*

Douglas McConatha, Ph.D., *University of Utah*

Roger W. Mustalish, Ph.D., *University of Minnesota*

Maura J. Sheehan, Sc.D., *University of Pittsburgh*

## ASSISTANT PROFESSORS

Bethann Cinelli, D.Ed., *Pennsylvania State University*

Gopal Sankaran, M.D., Dr. P.H., *University of California, Berkeley*

Charles V. Shorten, Ph.D., *Clemson University*

## ADJUNCT INSTRUCTOR

John P. Maher, M.D., *S.U.N.Y.*

The Department of Health offers degree programs leading to the Master of Education in health, Master of Science in health, and a concentration in health services administration within the Master of Science in Administration.

The Master of Education enriches academic preparation for teaching in elementary and secondary schools and/or first-level employment in the various professions related to health.

The Master of Science is designed primarily to meet the individual needs of the graduate student who wishes to pursue graduate work as an aid to upgrading a career in government, industry, research, or a related health profession. The M.S. is recommended for persons planning for doctoral study.

The health services administration concentration in the Master of Science in Administration program meets the needs of those persons interested in entering the field of health administration, and of those persons presently in health administration interested in upgrading their careers. The department also offers a certificate in gerontology.

## COMMUNICATION WITH THE DEPARTMENT

**Changes in the curricula for M.S.A., M.S., and M.Ed. programs are anticipated for the academic year 1991-92.** All inquiries and other communications regarding the graduate program in health should be addressed: Graduate Coordinator, Department of Health, School of Health Sciences, West Chester University, West Chester, PA 19383 (215) 436-2931.

## MASTER OF SCIENCE PROGRAM

### Admission to the M.S. Program

Applicants must meet the basic requirements of the University, given under Admission, and must present either a baccalaureate degree attained in their anticipated major area of health or equivalent preparation in a related field. They must also present the results of the aptitude section of the Graduate Record Examination or the Miller Analogies Test and two letters of recommendation.

### Admission to M.S. Degree Candidacy

Within the 15 semester hours of precandidacy, majors in health must complete departmental and concentration core courses with a minimum grade point average for these and all other courses during precandidacy of 3.0.

### Requirements for the M.S.

1. Satisfactory completion of the M.S. curriculum shown below with an overall average of 3.0.
2. Satisfactory performance on the written and/or oral comprehensive examinations.
3. Oral defense of the thesis.

### Registration Policy for Thesis Credits

Thesis credits for the M.S. are earned in HEA 608 and HEA 610. Satisfactory completion of the departmental comprehensive examinations is required before registration for HEA 608 is permitted. The thesis proposal (HEA 608) must be formally accepted before the student may register for thesis credit (HEA 610). Usually, the student can enroll in HEA 608 and HEA 610 only once. However, an additional enrollment in HEA 610 can be granted by the coordinator of graduate studies.

## CURRICULUM

(30-36 semester hours)

1. **Degree Core** 6 semester hours
  - HEA 520 Scientific Basis for Health (3)
  - HEA 531 The Community as a Basis for Health (3)
2. **Concentration Core** 6 semester hours
 

Students must select one of the concentrations below:

  - A. **SCHOOL HEALTH**
    - HEA 620 School Health Problems (3)
    - HEA 622 Curriculum and Instruction for Health Education (3)
  - B. **PUBLIC HEALTH**
    - HEA 530 General Environmental Health (3)
    - HEA 632 Advanced Theories of Health Behavior (3)
  - C. **ENVIRONMENTAL HEALTH\***
    - HEA 530 General Environmental Health (3)
    - HEA 540 Seminar in Environmental Health (3)
  - D. **GERONTOLOGY\***
    - HEA 522 Gerontology (3)
    - HEA 519 Geriatrics (3)
3. **Concentration Electives** 9-15 semester hours
 

Selected under advisement
4. **Additional Degree Requirements** 9 semester hours
  - PSY 501 Introductory Statistics for the Behavioral Sciences (3), *or*
  - STA 521 Statistics (3) *and*
  - HEA 608 Thesis Seminar (3)
  - HEA 610 Thesis (3)

Students with inadequate preparation in research methodologies must enroll in HPE 600 as part of their concentration electives.

## MASTER OF EDUCATION IN HEALTH

### Admission to the M.Ed. Program

In addition to meeting the basic requirements of the University, given under Admission, applicants must present a baccalaureate degree attained in the field of health, or equivalent preparation in a related field and two letters of recommendation.

### Admission to M.Ed. Degree Candidacy

Within the 15 semester hours of precandidacy, the student must complete departmental and concentration core courses with a Grade Point Average (GPA) of 3.0.

### Requirements for the M.Ed.

1. Satisfactory completion of the M.Ed. curriculum shown below, with an overall grade point average of 2.75, and a 3.0 GPA in the concentration.
2. Satisfactory performance on the written and/or oral comprehensive examination.
3. Successful completion of the research project.

### Registration Policy for Research Credits

Research credits for the M.Ed. are earned in HEA 606 and HEA 607. These credits must be preceded by successful completion of HPE 600 or EDF 500. The research project proposal (HEA 606) must be formally accepted before the student may register for HEA 607. Usually, the student can enroll in HEA 606 and HEA 607 only once. However, an additional enrollment in HEA 607 can be granted by the coordinator of graduate studies.

## CURRICULUM

(34 semester hours)

1. **Degree Core** 6 semester hours
  - HEA 520 Scientific Basis for Health (3)
  - HEA 531 The Community as a Basis for Health (3)

\* The concentrations in environmental health and gerontology require 15 semester hours of electives.



- 2. Concentration Core** 6 semester hours  
Students must select one of the concentrations below:
- A. **SCHOOL HEALTH**
    - HEA 620 School Health Problems (3)
    - HEA 622 Curriculum and Instruction for Health Education
  - B. **PUBLIC HEALTH**
    - HEA 530 General Environmental Health (3)
    - HEA 632 Advanced Theories of Health Behavior (3)
  - C. **GERONTOLOGY**
    - HEA 522 Gerontology (3)
    - HEA 519 Geriatrics (3)
- 3. Concentration Electives** 9 semester hours  
Selected under advisement
- 4. Additional Degree Requirements** 13 semester hours
- EDF 510 Educational Foundations (3)
  - HPE 600 Methods and Materials of Research (3) *or*
  - EDF 500 Methods and Materials of Research in Education (3)
  - and*
  - PSY 501 Introductory Statistics for the Behavioral Sciences (3)
  - HEA 606 Research Project Seminar (2)
  - HEA 607 Research Project Seminar (2)

## CONCENTRATIONS IN HEALTH SERVICES ADMINISTRATION AND LONG-TERM CARE—MASTER OF SCIENCE IN ADMINISTRATION

### Admission to the M.S. Program

Applicants must meet the basic requirements of the University, given under Admission, and must present either a baccalaureate degree attained in their anticipated major area of health or equivalent preparation in a related field. They must also present the results of the aptitude section of the Graduate Record Examination or the Miller Analogies Test, submit a one-page statement of career objectives, arrange for two letters of recommendation, and have an interview with the degree admissions committee.

### Admission to the M.S. Degree Candidacy

Within the 15 semester hours of precandidacy, majors in the health services administration concentration must complete three of the administration core courses and two of the health services administration core with a minimum GPA of 3.0.

### Requirements for the M.S.

1. Satisfactory completion of the M.S. in administration curriculum shown below with an overall average of 3.0.
2. Satisfactory performance on the written and/or oral comprehensive examinations.

### CURRICULUM

(36-39 semester hours)

- 1. Administration Core** 18 semester hours
  - ADM 501 Administration Theory and Environment (3)
  - ADM 502 Computers for Managers (3)
  - ADM 503 Accounting for Administration (3)
  - ADM 504 Communication for Administrators (3)
  - ADM 505 Organizing Human Resources (3)
  - ADM 506 Budgeting and Fiscal Management (3) *or*
  - ADM 507 Liability for Managers (3)
- 2. Health Department Core** 6 semester hours
  - HEA 520 Scientific Basis for Health (3)
  - HEA 531 The Community as a Basis for Health (3)
- 3. Health Services Administration Core** 6 semester hours
  - HEA 630 Health Care Administration (3)
  - HEA 631 Health Services Law (3)
- 4. Long-Term Care Core** 15 semester hours
  - HEA 518 Applied Gerontology (3)
  - HEA 522 Gerontology (3)
  - HEA 535 Health Workshop (1-3)
  - HEA 630 Health Care Administration (3)
  - HEA 631 Health Services Law (3)
- 5. Concentration Electives** 6 semester hours  
Selected under advertisement

## COURSE DESCRIPTIONS

### HEALTH

Symbol: HEA

**500 Diseases (3)** Provides a contemporary view of disease and prevention, and a more precise understanding of disease processes. Body systems are reviewed and the etiology, pathophysiology, symptoms, diagnostic techniques, and treatment methods used in selected diseases are studied. Illnesses most frequently found in our society are explored.

**503 Advanced Human Nutrition (3)** Selected topics in human nutrition will be extensively examined, such as fiber and health, vitamins and minerals in health and disease, methods of weight control, anorexia nervosa, and bulimia. Emphasis is placed on methods of evaluating nutrition-related literature and claims, and interpretation of data and scientific studies relevant to nutrition.

**511 Stress Management Techniques and Program Development (3)** The first half of the course is devoted to examining basic stress concepts, the psychophysiology of stress, common stressors and their effect, and the relationship between stress and disease. The

second half consists of a comprehensive review of stress management techniques, such as cognitive restructuring, relaxation techniques, and relationship-building techniques. Considerable emphasis is placed on personal application and group interaction in the classes.

**517 The Aging Consumer (3)** An analysis and discussion of the unique consumer needs of the elderly, particularly as they relate to personal health. Topics will include health insurance, costs of health care and delivery, and maintenance of healthful day-to-day living, among others. Strategies for solving these consumer health problems will be presented.

**518 Applied Gerontology (3)** Design and development of health programs to provide services for the aging population in order to assist them to live as independent members of their communities. PREREQ: HEA 517, 519, 522, or permission of instructor.

**519 Geriatrics (3)** A detailed discussion of physical and mental disabilities and diseases that often accompany the aging process. Methods of treatment for these disorders will also be presented.

**520 Scientific Basis for Health (3)** An overview of scientific and epidemiological

principles of disease causation and health risk assessment.

**521 Sociological Basis for Health (3)** Past and recent scientific developments in selected sociological health problems. Analysis of research findings in the areas of social and mental health, the place of these findings in the basic content in health education, and their practical application through group behavior.

**522 Gerontology (3)** Information on past and present trends concerning services to the elderly. Discussions on contemporary gerontological problems and factors affecting the treatment of the elderly. This broad-based, introductory course is for those interested in the aging population.

**523 Consumer Education (3)** Consumer-related problems of the individual and society. Consumerism, cost, and delivery of health services, and the effect on individual and societal health. Consumerism and the law.

**524 Problems in Industrial Health (3)** A study of the anticipation, recognition, evaluation, and control of health hazards in the work environment.

**525 Elementary School Health Education (3)** Trends in elementary school health, curricular

approaches and emphasis, teaching strategies, motivational techniques, resources, materials, issues, problems, and evaluations. PREREQ: Background in elementary education.

### **530 General Environmental Health (3)**

Methods of promoting health by controlling environmental factors relating to air, water, wastes, housing, radiation, and industrial hygiene.

### **531 The Community as a Basis for Health (3)**

An analysis of the community with its diverse population, and its response to critical and current health problems. Emphasis will be placed on the need for balance between individual and community needs, rights, and responsibilities.

**532 Hospital Environment (3)** A comprehensive assessment of the environmental health aspects of hospitals, including microbiologic considerations, environmental hygiene, safety, general sanitation, and administration.

**533 Water Quality and Health (3)** An examination of the physical, chemical, and biological characteristics of natural waters and their significance for human health, methods of water treatment and distribution will also be considered.

**534 Watershed Dynamics (3)** A detailed examination of watersheds, with emphasis on spatial and temporal variability of water pollution parameters. Methods of assessing pollution of water resources will be presented.

**535 Health Workshop (1-3)** In-depth study of selected topics current to the interests and needs of professionals serving in various health and health-related areas. Topics for each workshop will be announced prior to the first day of each semester.

**536 Hazardous Waste Management (3)** An assessment of the sources, characteristics, and human health effects of hazardous wastes, with emphasis on the design and implementation of control practices.

**537 Water Pollution Control (3)** The principles and practice of pollution control of municipal and industrial wastewaters. Emphasis on wastewater characterization, monitoring, and treatment facility operations.

### **540 Seminar in Environmental Health (3)**

Directed readings and discussions on contemporary issues in environmental health.

### **553 Applied Occupational Safety (3)**

Practices to reduce safety risks in the work environment through recognition, evaluation, and control of safety hazards.

**606 Research Project Seminar I (2)** The M.Ed. candidate selects a problem for a research report, reviews the literature, develops procedures, and collects appropriate data. Students are expected to complete the first three chapters of the research report during Seminar I. PREREQ: HPE 600 or EDF 500.

**607 Research Project Seminar II (2)** M.Ed. candidates are expected to complete their research reports in this seminar. PREREQ: HEA 606.

**608 Thesis Seminar (3)** A course for the M.S. candidate, who selects a topic, reviews the literature, develops procedures, and prepares a proposal acceptable to the thesis committee.

**609 Independent Study and Special Projects (1-3)** Research projects, seminar papers, reports of special conferences, and reading in health. PREREQ: Administrative approval.

**610 Thesis (3)** Undertaken upon completion of HEA 608.

**611 Field Placement (3)** A project for students in health concentrations. All core course work should be completed before beginning the project.

**620 School Health Problems (3)** Study of school health problems, using a variety of materials, methods, and resources.

**621 Human Sexuality in a Changing Society (3)** Problems involving sexual organs, such as dysfunction. Changing sexual attitudes and behavior of individuals, families, and society. Commercial sex, misinformation, sex and the law, and population control. Sex education for home and school.

**622 Principles of Curriculum and Instruction for Health Education (3)** Alternatives for viewing and reviewing instructional programs. Existing rationales. Conception of curriculum. Developing effective curriculum.

**623 Addictive Diseases (3)** Designed to assist the student and in-service teacher in developing knowledge and insight into the addictive diseases (alcohol, drugs, tobacco, and gambling). Use of resource personnel.

**630 Health Care Administration (3)** Administrative and management techniques acquired in the administrative core are applied to the problems involved in health administration management. Topics will include federal, state, and local health agencies, health care centers, organization principles; personnel factors; public relations, and fiscal management.

**631 Health Services Law (3)** An analysis of

the basic legal concepts and major legal issues that are important to and directly affect the health services administrator. Topics include legal frameworks of health organizations and health practitioners, administrative policy, contracts, consent, patient's rights, legal death, insurance, liability, and research.

### **632 Advanced Theories of Health Behavior (3)**

An advanced course on current theories in health behavior and the application of these theories to management methods in the health care field. Topics include trends in health behavior, health concerns, analysis of the decision-making process, and factors affecting health behavior.

## **UNDERGRADUATE COURSES FOR GRADUATE CREDIT**

The Health Department has approved the following undergraduate courses for graduate credit when scheduled with the approval of the student's advisor and department chairperson.

**410 Mental Health (3)** Designed to aid persons in improving their understanding of themselves and others. Emphasis on ways to recognize mental health problems.

**451 Toxic Substances (3)** An investigation of the health problems caused by toxic substances primarily in the workplace, but also in the general environment. Industrial hygiene methods of using technology to evaluate and control toxic substances will be discussed and demonstrated.

**459 Industrial Health Engineering (3)** Students will learn the various environmental health control strategies and the theoretical bases for these strategies. Students will also improve their quantitative skills by solving problems concerning the control of environmental health and safety hazards. Cost effectiveness, as well as technical effectiveness, will be discussed.

**460 Industrial Hygiene Techniques\* (3)** Evaluation techniques for monitoring the industrial environment will be learned in a laboratory setting and in the field. These techniques will include monitoring of air quality, air flow, noise, heat stress, and radiation. Evaluation of personal protective equipment, pulmonary function testing, and audiometric testing will also be investigated. PREREQ: HEA 350, 452, or permission of instructor.

\*A laboratory fee may be charged

## **History**

506 Main Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2201

Dr. Heston, *Chairperson*  
Dr. Davidson, *Coordinator of Graduate Studies*

## **PROFESSORS**

H. James Burgwyn, Ph.D., *University of Pittsburgh*  
Florence Joseph Crowley, Ph.D., *University of Florida*  
Anne O. Dzamba, Ph.D., *University of Delaware*  
Claude R. Foster, Ph.D., *University of Pennsylvania*  
Thomas J. Heston, Ph.D., *Case Western Reserve University*  
Patricia C. Johnson, Ph.D., *University of Rochester*  
Donn C. Riley, Ph.D., *St. Louis University*  
Irene G. Shur, Ed.D., *University of Pennsylvania*

Norbert C. Soldon, Ph.D., *University of Delaware*  
 Jane B. Swan, Ph.D., *University of Pennsylvania*  
 John J. Turner, Jr., Ph.D., *Columbia University*  
 Richard J. Webster, Ph.D., *University of Pennsylvania*  
 Robert J. Young, Ph.D., *University of Pennsylvania*

## ASSOCIATE PROFESSORS

Raymond A. Doyle, M.S., *West Chester University*  
 W. Bennett Peters, Ph.D., *University of California at Santa Barbara*

## ASSISTANT PROFESSORS

Lawrence R. Davidson, Ph.D., *University of Alberta*  
 John H. Hanson, Ph.D., *Michigan State University*  
 Charles Hardy, III, Ph.D., *Temple University*

The Department of History offers two degrees: the Master of Arts in history and, in cooperation with the School of Education, the Master of Education in social science with a concentration in history.

The Master of Arts degree in history provides a sound foundation for more effective teaching on the secondary level, for study leading to the doctorate, and for persons employed in industry and government. Study for the degree also enriches students' general cultural background and helps them to evaluate current events in light of the past.

The M.A. in history may be earned by completing either a thesis or nonthesis program. The candidate in the thesis program must pass a reading-proficiency test in an appropriate foreign language. The candidate, with the department chairperson's or graduate coordinator's permission, may substitute a demonstrated competency in statistics or a similar field. Students in the Master of Arts program in history (thesis or nonthesis option) are advised by the Department of History.

The Master of Education in history is designed to provide in-service teachers with additional professional education courses and an opportunity to enlarge their understanding of the historical past. It is also designed for the holders of the bachelor's degree who wish to earn state teacher certification while working toward a master's. Students in this program are advised by the Department of History.

In both programs, admission to full-degree candidacy requires a Grade Point Average (GPA) of 3.0 in history and a 2.75 overall.

Applicants who do not meet the above criteria may be admitted on a provisional basis. Students so admitted

should apply for full-degree candidacy upon completion of 12 to 18 hours of applicable course work with at least a 3.0 GPA.

In both programs, candidates must pass written comprehensive examinations at or near the conclusion of their course work. The comprehensives are administered once each semester. Those candidates wishing to take the comprehensives in a given semester should contact the graduate coordinator during the first three weeks of the semester.

## MASTER OF ARTS IN HISTORY

(30 semester hours)

### THESIS OPTION

American History (6)  
 European History (6)  
 Non-Western World History (6)  
 Seminar (in American, European, or Non-Western) (3)  
 HIS 500 Methods and Materials of Research in History (3)  
 (May be waived with permission of chairperson or graduate coordinator)  
 HIS 691 Thesis (3-6)  
 History Elective (1-3)

### NONTHESIS OPTION

American History (6)  
 European History (6)  
 Non-Western World History (6)  
 Seminar (in American, European, or Non-Western) (3)  
 HIS 500 Methods and Materials of Research in History (3)  
 (May be waived with permission of chairperson or graduate coordinator)  
 History Electives (6-9)

## MASTER OF EDUCATION IN SOCIAL SCIENCE

Concentration: History

(36 semester hours)

1. Professional education requirements (see page 42) 12 semester hours
2. History courses (under advisement) 15-18 semester hours
3. HIS 500 Methods and Materials of Research in History 3 semester hours
4. HIS 650, 651, or 652 3 semester hours
5. Electives (professional education or academic) 1-3 semester hours

The Department of History has approved the following undergraduate courses for graduate credit when scheduled with the approval of the student's advisor and/or the department's chairperson: HIS 406, 420, 421, 422, 423, 425, 426, 427, 435, 447, 451, 455, 462, and 474.

## COURSE DESCRIPTIONS

### HISTORY

See also Social Science (SSC)

Symbol: HIS

**500 Methods and Materials of Research in History (3)** Basic techniques and procedures in research; major types of research and methods for locating, evaluating, and interpreting evidence. The student develops a tentative outline, bibliography, and summary of an investigative procedure. Required of all degree-program students.

### 501 Studies in the History and Culture of South Asia (3)

The Indian sub-continent's dominant political, cultural, and economic institutions. Features which contribute to an understanding of modern India and Pakistan.

### 505 Studies in the History and Culture of East Asia (3)

The traditional basis for modern Chinese, Japanese, and Korean societies. The interaction between European and Asian cultures and resulting changes in East Asia.

### 509 Contemporary History of the Middle East (3)

Recent history of major Middle Eastern

societies, Iran and the oil situation, Israel and the Palestinian question, conflicting cultures.

**510 History of Pennsylvania (3)** The founding and development of Pennsylvania from its colonial beginnings to the present, with emphasis on the relation of the past to the present.

**511 Studies in the History and Culture of Emerging Africa (3)** Emergence of modern African nationalism against the background of traditional African society and the legacy of European colonialism.

**512 Independent Black Africa (3)** The post-war experience of Sub-Saharan Africa, viewed in the light of the end of European colonial administration and the growth of an independent African society.

**515 The Cultural and Intellectual History of Latin America (3)** Pre-Columbian art and thought, scholasticism, mercantilism, the Great Debate, Baroque architecture, Enlightenment, conservatism, liberalism, Romanticism, Modernism, Positivism, Jose Enrique Rodo, Aprismo, Mexican muralists, novel of social protest, existentialism, and music. Lineaments of the Latin-American mind.

**516 Modern Mexico (3)** Mexico during the 19th and 20th centuries; stress upon the dramatic transformation of Mexico from backwardness to modernity in the short period of a century-and-a-half.

**530 Problems in Medieval Civilization (3)** Rise and fall of the Byzantine Empire, conquests of the Arabs and Turks, the crusades for the recovery of the Holy Land; the religious orders and the universal aspirations of the Papacy.

**531 The Renaissance (3)** Political, social, and cultural transitions in Italy and Northern Europe, 1350-1550.

**532 The Reformation (3)** Major and minor Protestant leaders and their movements, effects on the evolving nation-states; the Church of Rome's response; Wars of Religion and Treaty of Westphalia; the Scientific Revolution.

**533 Dynastic Europe: 1648-1789 (3)** The absolute dynastic monarchy as best exemplified by France, Prussia, and Russia; the middle class challenge as typified by the English experience; the Enlightenment and the New Science; capitalism; colonialism; and wars of empire.

**534 The French Revolution and the Napoleonic Era: 1789-1815 (3)** Causes of the French Revolution, failure of absolutism, Reign of Terror, the Directory; rise of Napoleon Bonaparte and his contribution to the Revolution; the Empire — its rise and collapse; Congress of Vienna.

**535 Nationalism and Democracy: 1815-1914 (3)** Aftermath and effect of the French Revolutionary era; events brought on by the growth of nationalism and democracy; development of the industrial revolution. Roots of the First World War.

**536 Europe Since 1914 (3)** Twentieth century Europe, with emphasis on causes of World War I: Europe between World War I and World War II; problems of contemporary Europe.

**540 The Evolution of Modern Russia (3)** A cultural approach to the historical development of Russia from the foundation of Kiev to the Revolution of 1917. Emphasis is on Russia's political and aesthetic uniqueness.

**541 Tudor and Stuart England (3)** Social, cultural, religious, political, and economic developments during the Tudor and Stuart reigns; building a strong Tudor monarchy; the English Reformation; Stuart Absolutism; Puritan

Revolution, Civil War, and the Commonwealth; the beginning of Empire; the Restoration, Glorious Revolution, and growth of English constitutionalism.

**545 Holocaust (3)** The study of steps leading to the Holocaust (1933-1945), the Holocaust itself, and the aftermath. The rise of contemporary Nazism is included.

**550 Colonial America: 1607-1763 (3)** Development of the 13 colonies of Anglo-America from their settlement to mid-18th century. Emphasis on a conceptual analysis of specific events and problems.

**551 Revolutionary America: 1763-1789 (3)** American development from the mid-18th century to the framing of the Constitution, with emphasis on the causes of the American Revolution and the evolution of American institutions and ideas throughout the period.

**553 The Rise of the New Nation: 1789-1850 (3)** A historiographical approach involving interpretations of the foundations and development of the Federalist Party, emergence of Jeffersonian Democracy, evolution of Jacksonian Democracy, and events of the Middle Period leading to the decade of controversy.

**554 Civil War and Reconstruction: 1850-1877 (3)** The War and its aftermath as the great watershed of United States national history. Emphasis on the conflicting interpretations of the causes, nature, and effects of the Civil War.

**555 Emergence of Modern America: 1876-1923 (3)** Rise of industry, labor, immigration, and new cultural patterns; emergence of new political alignments, use of imperialism, development of liberalism and reform; America's struggle for neutrality and her participation in World War I.

**556 America Since 1919 (3)** The impact of urbanization and industrialization on society, politics, and economics; the problems of wars — declared and undeclared — and the various policies for peace.

**557 Problems in American Constitutional Development (3)** Selected problems in the development of American constitutional government. The progressive adaptation of the law to a changing social and economic order. Conflicts such as nationalism versus states' rights, and vested rights versus police power.

**558 Recent American Diplomatic History (3)** American foreign policy in Europe, Asia, Latin America, and the Middle East from 1945 to the present. Objectives sought by the United States and the political, military, economic, and social policies pursued; origins of the Cold War.

**559 American Urban History (3)** Research methods and approaches for studying the history of cities in America. Emphasis on quantitative analysis, including studies of urban population, social mobility, and voting patterns.

**560 American Labor Since 1865 (3)** American laborers and labor organizations in the past 100 years; industrialization, immigration, and labor; women, children, and minorities in labor

organizations; political parties, radical groups, and violence as factors in labor history; economic conditions and labor; Big Labor.

**561 The Indian in America's Past (3)** The dispossession of the American Indian: land seizures, wars and treaties, and cultural contact; customs, mores, economic, and religious life of the Indian; assimilation and preservation of Indian culture.

**563 Biography (3)** Considers the role of the individual and the writing of biography as a problem in historical thinking and research.

**601 Directed Readings in American History (3)** A critical examination of significant works on selected topics in the field. PREREQ: Permission of graduate coordinator.

**602 Directed Readings in European History (3)** A critical examination of significant works on selected topics in the field. PREREQ: Permission of graduate coordinator.

**603 Directed Readings in World and Regional History (3)** A critical examination of significant works on selected topics in the field. PREREQ: Permission of graduate coordinator.

**650 Seminar in American History (3)** Selected problems in American history. Subject announced in advance of each semester. PREREQ: HIS 500.

**651 Seminar in European History (3)** Selected problems in European history. Subject announced in advance of each semester. PREREQ: HIS 500.

**652 Seminar in History of the Non-Western World (3)** Selected problems in non-Western world history. Subject announced in advance of each semester. PREREQ: HIS 500.

**660 Field Studies in History (3-6)** A fully supervised learning experience, usually a tour, designed to expose students to the culture, artifacts, and research facilities of a given country or area.

**690 Independent Studies in History (1-3)** Research projects, reports, and readings in history. PREREQ: Approval of department chairperson.

**691 Thesis (3-6)**

## SOCIAL SCIENCE

Symbol: SSC

**502 Methods and Materials for Teaching Social Studies (3-6)** Current practices and procedures, organization and planning; the use of classroom, library, and curriculum materials; testing, measurements, and evaluation; bibliographical sources for both teachers and students.

**580 Ethnic Cultures Institute (3)** An interdisciplinary offering, the institute considers the contributions of ethnic groups to the culture of the United States. Designed primarily for teachers, community action personnel, and students who wish to increase knowledge and skills for developing meaningful intergroup relationships and improving classroom instruction. Educators and community leaders take part.

## Instructional Media

Room 302E Recitation Hall

West Chester University

West Chester, PA 19383

(215) 436-2233

Dr. Spiecker, *Chairperson*

Mr. Redmond, *Coordinator of Graduate Studies*

### PROFESSORS

Joseph M. Spiecker, Ed.D., *Nova University*

Richard L. Strayer, Ed.D., *Temple University*

### ASSOCIATE PROFESSOR

David L. Redmond, M.S., *Syracuse University*

### ASSISTANT PROFESSORS

Robert Momeyer, M.Ed., *Lehigh University*

Russell E. Reis, M.Ed., *West Chester University*

Nancy J. Rumfield, M.S., *West Chester University*

### Admission to Degree Candidacy

Before completing 15 semester hours, students must meet the following requirements for degree candidacy:

1. A 3.0 average in EDM course work.
2. A 2.75 in overall graduate studies.
3. Successful performance on the Miller Analogies Test or Graduate Record Test.
4. Satisfactory performance on a qualifying examination in instructional media after completion of 12 semester hours.

### Degree Requirements

1. Successful completion of all course work.
2. A 3.0 average in courses in educational media.
3. A 2.75 in overall graduate work.
4. Satisfactory performance on the comprehensive examination.

### MASTER OF SCIENCE

This program is designed for the many fields outside education where highly skilled personnel are needed in the growing areas of training and instructional media.

#### COURSE LIST

##### a) Required courses 27-30 semester hours

- EDM 502 Selection and Effective Utilization of Instructional Media (3)
- EDM 503 Developing Mediated Individualized Program (3)
- EDM 505 Theory of Motion Picture Production (3)
- EDM 523 Design of Production of Visual Materials (3)
- EDM 525 Basic Photography (3)
- EDM 533 Basic TV Production (3)
- EDM 560 Organization and Administration of Media Programs (3)
- EDM 563 Field Study of Media Programs (3)
- EDM 591 Seminar in Research in Communications (3-6)

##### b) Concentration area 9 semester hours

(six credits in one of the following, totalling nine credits in area of concentration)

##### Photography

- EDM 513 Production of Multimedia Programs (3)
- EDM 525 Basic Photography (3)
- EDM 526 Intermediate Photography (3)
- EDM 528 Advanced Still Photography (3)

##### Cinematography

- EDM 505 Theory of Motion Picture Production (3)
- EDM 529 Production of 8-mm Motion Pictures (3)
- EDM 530 Cinematography I (3)
- EDM 531 Cinematography II (3)

##### Television

- EDM 533 Basic TV Production I (3)
- EDM 534 Instructional Television Production II (3)
- EDM 535 Instructional Television Production III (3)

##### Research in Communication

- EDF 500 Methods and Materials of Research (3)
- RES 520 Research Design (3)
- EDM 595 Independent Studies in Instructional Media (1-3)
- RES 650 Research Report (3)
- EDM 591 Seminar in Research in Communications (3-6)

### MASTER OF EDUCATION

(33 semester hours)

This degree is offered to candidates who possess an Instructional Level I or Instructional Level II certificate. It prepares them for positions as instructional media coordinators in elementary and secondary schools, and for instructional and administrative positions in colleges.

#### COURSE LIST

##### a) Required courses outside department 6 semester hours

- EDF 500 Methods and Materials of Research in Education (3)
- EDF 510 Educational Foundations (3)

##### b) Required EDM courses 15 semester hours

- EDM 502 Selection and Effective Utilization of Instructional Media (3)
- EDM 503 Developing Mediated Individualized Programs (3)
- EDM 523 Design of Production of Visual Materials (3)
- EDM 560 Organization and Administration of Media Programs (3)
- EDM 590 Internship in Instructional Media (3-6)

##### c) Electives 12 semester hours

- (Chosen under advisement)
- EDM 501 Orientation to Instructional Media (3-6)
- EDM 508 Instructional Materials in the Elementary School Curriculum (3)
- EDM 513 Production of Multimedia Programs (3)
- EDM 524 Advanced Production of Visual Materials (3)
- EDM 525 Basic Photography (3)
- EDM 526 Intermediate Photography (3)
- EDM 528 Advanced Still Photography (3)
- EDM 529 Production of 8-mm Motion Pictures (3)
- EDM 530 Cinematography I (3)
- EDM 531 Cinematography II (3)
- EDM 533 Basic Television Production I (3)
- EDM 534 Instructional Television Production II (3)
- EDM 535 Instructional Television Production III (3)
- EDM 563 Field Study of Media Programs (3)
- EDM 565 Seminar in Mass Media (3)
- EDM 591 Seminar in Research in Communications (3-6)

### CERTIFICATION PROGRAM

#### Instructional Technology Specialist

Courses required for certification in the Instructional Technology Specialist Certification Program include EDM 502, 503, 523, 560, and 590. Courses may also be required in photography, film, or TV, depending on the student's entry level into the certification program. To receive the certificate, students must successfully complete 24 credits and a proficiency exam.

**COURSE DESCRIPTIONS****INSTRUCTIONAL MEDIA**

Symbol: EDM

**501 Orientation to Instructional Media (3-6)**

Survey of modern instructional media with opportunities for laboratory activities.

**502 Selection and Effective Utilization of Instructional Media (3)**

Evaluates diverse types of instructional media and explores means of integrating and using media in educational and training programs.

**503 Developing Mediated, Individualized Programs (3)**

A workshop stressing the development of individualized, mediated instructional packages using the systems approach.

**505 Theory of Motion Picture Production (3)**

History and development of the motion picture, with emphasis on educational motion pictures. Cinematographic techniques, the impact of 35-mm and 16-mm; comparing film to television production. An evaluation of diverse types of films as they apply to learning.

**508 Instructional Materials in the Elementary School Curriculum (3)**

Practice in techniques of using and evaluating communications media in the classroom. Correlating audio-visual materials and techniques with the elementary program.

**513 Production of Multimedia Programs (3)**

Lectures, discussions, demonstrations, field trips, and lab sessions. Each student will prepare an independent learning package or module for an assigned topic and target population. PREREQ: EDM 525.

**523 Design and Production of Visual**

**Materials (3)** Students explore the areas of design as they relate to the production of visual instructional materials to be used as an integral

part of the curriculum. The phases of perception, communication, and learning theories are covered in relation to the integration and use of visual instructional media in education and training programs.

**524 Advanced Production of Visual Materials (3)**

Design and production of projectuals using technamation, color inhibition, photocopy, and advanced diazo techniques. Investigation of commercial production of transparencies. PREREQ: EDM 523.

**525 Basic Photography (3)**

A basic laboratory course in taking and processing still pictures

**526 Intermediate Photography (3)**

A workshop course for those who have had a basic photography course or previous photographic experience. This course will stress an aesthetic, creative approach to black-and-white and color photography with small format cameras, and will involve advanced techniques of exposure, lighting, composition, macrophotography, and film and print processing. PREREQ: EDM 525.

**528 Advanced Still Photography (3)**

Lecture and laboratory experiences in the use of large-format cameras. PREREQ: EDM 525.

**529 Production of 8-mm Motion Pictures (3)**

Prepares teachers to produce and guide students in the production of 8-mm films.

**530 Cinematography I (3)**

Theory of motion picture production; comparing film to TV production.

**531 Cinematography II (3)**

Editing and sound recording on 16-mm films. PREREQ: EDM 530.

**533 Basic TV Production I (3)**

Development of educational television and the instructional use of commercial, educational, and closed-circuit television.

**534 Instructional Television Production II**

**(3)** Planning, writing, producing, and evaluating instructional television productions. PREREQ: EDM 533.

**535 Instructional Television Production III (3)**

Production of telecasts in selected subject areas with emphasis on videotape recording. PREREQ: EDM 534.

**552 Computer Applications in Education (3)**

Development of specialized instructional and management applications of hardware and software, including the use of desktop publishing.

**560 Organization and Administration of Media Programs (3)**

The function of the school's educational media program, selection and evaluation of materials and equipment, unit costs, problems of developing and maintaining an efficient operation. PREREQ: 12 graduate credits in educational media.

**563 Field Study of Media Programs (3)**

A scheduled group or individualized tour, foreign or domestic, in which students investigate notable installations or projects in educational media.

**565 Seminar in Mass Media (3)**

Explores current problems in the use of instructional media. PREREQ: 12 graduate credits in educational media.

**590 Internship in Instructional Media (3-6)**

Practicum in supervising and implementing instructional services. PREREQ: 18 credits in educational media.

**591 Seminar in Research in Communications (3-6)**

Basic elements of communication theory, applied to audio-visual education. Research in audio-visual communication is analyzed.

**595 Independent Studies in Instructional Media (1-3)****598 Workshop in Instructional Media (3-6)****Leadership for Women**

207 Ruby Jones Hall

West Chester University

West Chester PA 19383

(215) +36-2746 or (215) 436-2464

Dr. Rengert, *Program Concentration Advisor*

Dr. Milne, *Director, Master of Science in Administration*

Dr. Schlau, *Director of Women's Studies*

**WOMEN'S STUDIES GROUP****PROFESSORS**

Diane O. Casagrande, Ph.D. (*Speech and Theater*)

Mary E. Crawford, Ph.D. (*Psychology*)

Anne Dzamba, Ph.D. (*History*)

Patricia C. Johnson, Ph.D. (*History*)

Mary Keetz, Ph.D. (*Education*)

Lynette F. McGrath, Ph.D. (*English*)

Tahany Naggar, Ph.D. (*Economics*)

Carol Radich, Ph.D. (*Education*)

Arlene Rengert, Ph.D. (*Geography*)

Jane Swan, Ph.D. (*History*)

C. James Trotman, Ed.D. (*English*)

Richard J. Webster, Ph.D. (*History*)

**ASSOCIATE PROFESSORS**

Emma Lee Brown, M.S.L.S. (*Library*)

Elizabeth Larsen, Ph.D. (*English*)

Stacey Schlau, Ph.D. (*Foreign Languages*)

**ASSISTANT PROFESSORS**

Mary Anne Burns-Duffy, M.S.L.S. (*Library*)

Robin Garrett, M.S.N. (*Nursing*)

Elizabeth A. Giangiulio, M.Ed. (*Career Development*)

Deborah Mahlstedt, Ph.D. (*Psychology*)

Mary McCullough, M.S.W. (*Speech Communication and Theater*)

Geetha Ramanathan, Ph.D. (*English*)

Leadership for Women is a concentration within the Master of Science in Administration program. It addresses organizational power, which sometimes is inequitable for men and women of equal training and talent. It recognizes that women who seek to advance to leadership positions often become change agents within the organization, and sometimes within their families and community as well.



This concentration consists of four required and two elective courses. The required courses involve reading and study of feminist perspectives on initiating, responding to, and managing change. They examine theories and practices that clarify values. They contain models and strategies for resolving the conflicts and logistical dilemmas vital to a successful administrative career that differ from conventional sex role ascription of status and power.

Students also may take these required courses individually in other concentrations (number of semester hours in parentheses):

WOS 530 Women in Leadership: Critical Issues (3)

WOS 531 Management of Leadership: Laboratory Course (3)

WOS 533 The Woman Executive: Research Seminar (3)

PSY 465/565 Psychology of Women (3)

The student, with the approval of the advisor, chooses two electives appropriate to specific career interests. Examples include:

◆ WOS 539 Research Project (3)

PSC 515 Women in Politics (3)

ECO 503 Economic Role of Women (3)

PSC 552 Civil Liberties and Civil Rights (3)

GEO 530 Demographic Analysis (3)

ENG 508 Writing Seminar (3)

ADM 612 Internship (3-6)

Comprehensive examination in concentration is required

Students in the degree program also take six required courses in the Administration Core:

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting Budgeting (3)

ADM 504 Communication for Administrators (3)

ADM 505 Organizing Human Resources (3), *and either*

ADM 506 Budgetary Process (3), *or*

ADM 507 Liability for Managers (3)

## COURSE DESCRIPTIONS

### WOMEN'S STUDIES

Symbol: WOS

#### 530 Women in Leadership: Critical Issues

(3) Survey of the literature that defines and discusses critical issues for the woman leader. Some issues center around lifestyle choices and conflicts (loneliness, family pressure) and others around organizational barriers and alternative means to overcome them

#### 531 Management of Leadership: Laboratory

Course (3) The study and practice of alternative leadership modes. The course uses workshop techniques to teach speech, small-group dynamics, and other communication skills, and problem-solving strategies.

#### 533 The Woman Executive: Research

Seminar (3) A seminar that requires each student to complete an original project on the goals, problems, choices, or successes of

women in middle- or upper-level management positions. The use of case studies, surveys, oral history, and other research techniques will be explored. An appropriate internship may be substituted for this course.

◆ **WOS Research Project (3)** A project to be developed independently by the student working with a specific instructor.

◆ This course may be taken again for credit.

## Linguistics

550 Main Hall

West Chester University

West Chester, PA 19383

(215) 436-2898

(Interdisciplinary Area)

Dr. Godfrey, *Coordinator*

### LINGUISTICS GROUP

Diane O. Casagrande, Professor (*Speech and Theatre*)

W. Stephen Croddy, Professor (*Philosophy*)

Dennis L. Godfrey, Assistant Professor (*English*)

John T. Kelly, Associate Professor (*English*)

Cheri L. Micheau, Assistant Professor (*English*)

Garrett Molholt, Assistant Professor (*English*)

Philip D. Smith, Jr., Professor (*Foreign Languages*)

Paul Stoller, Professor (*Anthropology-Sociology*)

Although West Chester presently offers no degree in linguistics, students interested in developing a concentration in this area may elect courses from the following list. For additional information, consult the coordinator.

## COURSE DESCRIPTIONS

### LINGUISTICS

Symbol: LIN

**501 Introduction to Linguistics (3)** Basic concepts of language description, classification, change, reconstruction, dialectology, and socio-linguistics.

#### 503 Phonology and Morphology (3)

Phonetics, phonemics, morphophonemics, and the morphological composition of words

**504 Syntax (3)** A comparative study of the various modern approaches to the study of grammar. PREREQ: LIN 501 or ENG 575.

**505 Transformational Grammar (3)** Basic concepts of transformational theory and their

application in teaching. PREREQ: LIN 501 or ENG 575.

#### 506 Meaning in Language (also PHI 506) (3)

See PHI 506

**512 Descriptive Linguistics (3)** Analysis of the phonemic, morphological, and syntactic features of typologically divergent languages. Procedures for eliciting linguistically relevant data about a language from a native speaker. PREREQ: LIN 503

**515 Language, Thought, and Behavior (also SPC 515) (3)** See SPC 515

**523 Philosophy of Language (also PHI 523) (3)** See PHI 523

**540 Sociolinguistics (also SOC 540) (3)** The

study of language in its social context: the ethnography of communication, language and society, social classes, ethnic groups, politics, sex, and education. PREREQ: LIN 501 or permission of instructor

**555 Psycholinguistics (3)** A study of the relationships between language and thought. Models of language, communication theory, and learning theory. Emphasis on natural language development and bilingualism

**580 Language and Culture (also ANT 580) (3)** Language as an aspect of culture, linguistic-perceptual-cognitive categories, social and psychological aspects of language. PREREQ: LIN 501 or permission of instructor

**590 Independent Study (1-3)**

**Management — See Business**

**Marketing — See Business**

## Mathematics and Computer Science

13-15 University Ave.

West Chester University

West Chester, PA 19383

(215) 436-2440

Dr. Weaver, *Chairperson*

Dr. Milito, *Coordinator of Graduate Studie.*

(215) 436-2690

### PROFESSORS

Richard G. Branton, Ph.D., *University of Pennsylvania*

James D. Fabrey, Ph.D., *Massachusetts Institute of Technology*

Albert E. Filano, Ph.D., *Pennsylvania State University*

Frank Grosshans, Ph.D., *University of Chicago*

Sebastian S. Koh, Ph.D., *University of California*

James E. L'heureux, Ph.D., *Louisiana State University*

Eli M. Mandelbaum, Ph.D., *University of Pennsylvania*

Michael Montemuro, Ed.D., *Temple University*

Waclaw Szymanski, D.Sc., *Polish Academy of Sciences*

John W. Weaver, Ph.D., *Johns Hopkins University*

### ASSOCIATE PROFESSORS

Shiv K. Gupta, Ph.D., *Case Western Reserve University*

John J. Kerrigan, D.Ed., *Temple University*

Elaine R. Milito, Ph.D., *Pennsylvania State University*

Ronnie L. Morgan, Ph.D., *University of Missouri*

Lin Tan, Ph.D., *University of California, Los Angeles*

Paul Wolfson, Ph.D., *University of Chicago*

Richard Wyatt, Ph.D., *University of California*

### ASSISTANT PROFESSORS

Clark Dean Horton, Ph.D., *Indiana University*

Jozsef Horvath, Ph.D., *Yale University*

Francoise E. Schrenmer, Ph.D., *University of Pennsylvania*

The Department of Mathematics and Computer Science offers the Master of Arts degree with options in pure mathematics, mathematics education, and applied computer science.

The first option is for students interested in furthering their mathematical background. It provides the foundation for continued work in mathematics leading to the Ph.D. in pure mathematics.

The second option is primarily directed to teachers of mathematics who wish to strengthen their background in mathematics and mathematics education; in addition, it provides the foundation for the Doctor of Arts or the Ph.D. in mathematics education.

The last option is primarily for those with backgrounds in mathematics or science, preparing them for computer technology and its applications. Students with other back-

grounds may tailor their programs to satisfy their particular needs and professional goals.

The department also offers the Master of Science in computer science. The primary purpose of the program is to provide students with a wide variety of courses in computer science. Opportunities also exist for students to engage in research. Students without a background in computer science may be admitted on probationary status.

The department also cooperates with the School of Education in offering the Master of Education degree in mathematics.

### ADMISSION TO THE M.A. PROGRAM

In addition to meeting the basic admission requirements of the University, applicants must schedule an interview with the department chairperson prior to enrollment. Applicants must have a minimum of 30 semester hours of mathematics, including a full treatment of calculus, at least one advanced undergraduate course in modern algebra, and one in advanced calculus. Deficiencies in these areas may be removed by successfully completing MAT 512 (Modern Algebra) and/or MAT 541 (Advanced Calculus). The department, at its discretion, may require the Graduate Record Examination (GRE).

### ADMISSION TO THE M.S. PROGRAM

In addition to meeting the basic admission requirements of the University, applicants must have completed course work in computer science and mathematics, including CSC 505-508, CSC 561, two semesters of calculus, and one semester of discrete math and statistics. Deficiencies in these areas may be removed by taking appropriate courses approved by the program advisor. The GRE is required.

### ADMISSION TO THE M.ED. PROGRAM

In addition to meeting the basic admission requirements of the University, applicants must schedule an interview with the graduate coordinator prior to enrollment. Applicants must present a minimum of 24 semester hours of mathematics, including a full treatment of calculus and at least one advanced undergraduate course in modern algebra or advanced calculus. Deficiencies in these areas may be removed by successfully completing MAT 512 (Modern Algebra) or MAT 541 (Advanced Calculus).

### REQUIREMENTS FOR THE M.A., M.S., AND M.ED. DEGREES

In addition to completing the course requirements shown below, candidates for any of these degrees must pass a comprehensive oral or written examination.

### MASTER OF ARTS IN MATHEMATICS PROGRAM

(30 semester hours)

#### 1. Core Courses

9 semester hours

Candidates in all options are required to take nine semester hours, including MAT 515 and 545, and either MAT 575 or an approved course in statistics or applied mathematics.

#### 2. Required Courses

12 semester hours

A. Pure Mathematics Option: MAT 516, 535, 546, and 575 (or 576 if 575 is selected for Core).



- B. Mathematics Education Option: MTE 504, 507, and 508, and one of the following: MTE 505, and 551 or 552.
- C. Applied Computer Science Option: as specified by student's graduate committee chairperson, depending on student's background and experience.

- 3. Electives** 9 semester hours  
Chosen under advisement from the course offerings below that bear the prefix MAT or STA, except MAT 503, 512, and 541. Students may modify this program with the approval of the department chairperson.

### MASTER OF SCIENCE IN COMPUTER SCIENCE PROGRAM

(30 semester hours)

- 1. Core Courses** 12 semester hours  
CSC 601, 602, 603, and 604
- 2. Required Courses** 12 semester hours  
Chosen under advisement from the following: CSC 521, 531, 541, 543, 571, 581, 610, and 620.

### COURSE DESCRIPTIONS COMPUTER SCIENCE

Symbol: CSC

**501 Introduction to Computers (3)** This course deals with defining computers and their capabilities, and exploring their history, societal implications of their usage, and application. A brief introduction to a programming language is provided, along with hands-on experience using wordprocessing, database, and spreadsheet programs (for nonmajors).

**502 Computers for Managers (3)** Management techniques for the evaluation, acquisition, and management of computer personnel and technology (for nonmajors). Required M.B.A. course.

**505 Introduction to Computer Science (3)** Introduction to the art and science of computing and its applications. Topics covered are elementary data structures, structured programming techniques, algorithm development, error analysis, and file manipulation. A final, substantive, programming project is required of each student. A structured programming language is used. PREREQ: Two years of high school algebra.

**506 Applied Software (3)** Techniques of program design, documentation, and implementation. Advanced features of the structured language of CSC 505 are studied and used. Emphasis is on data storage, data representation, and file structures. PREREQ: CSC 505.

**507 Data Structures (3)** Data structures are presented using the structured language of CSC 505. Topics include stacks, queues, linked lists, trees, sorting, and searching. PREREQ: CSC 506, calculus. Offered in fall and spring.

**508 Computer Organization (3)** Study of the architecture of a computer system and its language. Topics include array processing, stack handling, subroutines, parameter passing, interrupts, I/O processing, arithmetic operations, bit manipulation, and memory organization. PREREQ: CSC 506 and Calculus I. Offered in spring, fall, and summer.

**510 Computer Programming and Numerical**

**Methods (3)** Algorithmic methods are used to program the computer to solve numerical problems from science and engineering. PREREQ: Some high-level programming and one year of calculus.

**515 Introduction to Computer Programming (3)** The art and science of computing are introduced with emphasis on structured programming. Topics include looping, branching, arrays, and program development (for nonmajors). PREREQ: One year of high school algebra.

**521 Data Base Management Systems (3)** Detailed study of the characteristics of generalized data management systems, including a survey of some of the systems in widespread use. Emphasis is placed on how to improve the interface between managers and the information they need to make decisions through easy-to-use, generalized, reporting systems. PREREQ: CSC 507. Offered in fall.

**531 Operating Systems I (3)** Operating systems and their characteristics are studied. Maintenance of a complex operating system with emphasis on the important trade-offs made in tuning the system. Details of memory and file management, system accounting, and other user-related services are emphasized. PREREQ: CSC 507, 508, 561, discrete math, statistics or equivalent. Offered in fall.

**532 Operating Systems II (3)** A modularly constructed UNIX operating system, which uses the object-oriented programming techniques of message passing, is studied. Topics covered are process control and management, memory management, file management, systems accounting, and systems security. PREREQ: CSC 531.

**535 On-Line Computing (3)** Characteristics of data communication equipment. Design, implementation, and modification of information systems in an on-line environment are emphasized. File management systems and data structures appropriate to real-time computing are stressed, with particular emphasis on back-up and recovery techniques. PREREQ: CSC 507, 508, discrete math or equivalent. Offered in spring.

### 3. Electives

6 semester hours

Chosen with the approval of the student's advisor from course offerings bearing the prefix CSC, MAT, or STA, or involving the application of computer science to another discipline, such as psychology, economics, physics, etc.

### MASTER OF EDUCATION IN MATHEMATICS PROGRAM

(34 semester hours)

The candidate must satisfy the Professional Education Requirements as outlined on page 42.

In the area of concentration (20-22 semester hours), MAT 515 and 545, MTE 507, and either MTE 508 or 509 are required. Electives (8-10 semester hours) are chosen under advisement from the course offerings below bearing the prefix MAT or STA.

Students may modify the area of concentration with the approval of the graduate coordinator.

**541 Compiler I (3)** Translation, loading, and execution of a higher-level language. Syntax analysis of simple expressions and statements. Organization of a compiler, including compile-time and run-time symbol tables, error diagnostics, and object code optimization. Design and implementation of a simple compiler. PREREQ: CSC 507, 508, discrete math or equivalent. Offered in spring.

**542 Compiler II (3)** An in-depth study of syntax directed analysis, error recovery, and code optimization. Compiler language feature. PREREQ: CSC 541.

**543 Formal Languages (3)** A study of the various types of automata and their associated languages. Designed to give the student an understanding and appreciation of the production system for languages and their relationship to automata. PREREQ: CSC 507, 508, discrete math or equivalent. Offered in the fall of even-numbered years.

**550 Computers in Education (3)** An introductory computer literacy course. Students will become familiar with microcomputers in a "hands-on" setting. After learning to program in BASIC, students will create computer-based activities for use in their own professional settings.

**552 Computer Applications in Education (3)** Development of specialized instructional and management applications of hardware and software, including the use of desktop publishing.

**561 Simulation (3)** Computer simulation using logical, numerical, and Monte Carlo modelling to represent systems. Use of special languages to simulate actual systems. PREREQ: CSC 507, calculus, and statistics. Offered in spring, summer, and fall.

**571 Computer Graphics (3)** Construction and manipulation of prototypes for graphical display purposes. PREREQ: CSC 507 (or equivalent), and calculus and linear algebra. Offered in spring.

**581 Artificial Intelligence (3)** Thorough analysis and study of the LISP language in its application to non numeric problems and

symbol manipulations. Application to gaming, scene analysis and pattern recognition, linguistic analysis and semantic representation, image analysis and solution spaces, problem solving, and attention control. Each student is required to take one substantial problem and solve it using the LISP language and the techniques of artificial intelligence. PREREQ: CSC 507, discrete math or equivalent. Offered in the fall of odd-numbered years.

**585 Expert Systems (3)** Using the techniques of artificial intelligence and formal logic, methods are developed to establish knowledge bases and to extract inferences. Topics include backward and forward chaining, search methods, frames, and slots. PREREQ: CSC 507 and 508, and discrete math

**595 Topics in Computer Science (3)** Topics announced at time of offering. PREREQ: Consent of instructor. Offered as needed.

**601 Analysis of Computer Algorithms (4)** A treatment of time and space complexity of algorithms, including NP-hard and NP-complete problems. A survey of important and useful algorithms for sorting, searching, pattern matching, and graph manipulation are covered. PREREQ: Six credits of required courses

**602 Software Engineering (4)** Programming teams design and implement a realistic, fairly complex, software system. Design techniques, analysis, programming style, testing, and documentation will be stressed. PREREQ: Six credits of required courses.

**603 Journal Seminar I (2)** Student, in conjunction with professor, selects topics to be studied in depth via literature search, reading of pertinent articles, and speaking in the seminar. PREREQ: Nine credits of required courses.

**604 Journal Seminar II (2)** A continuation of Journal Seminar I. Each student is required to give several seminars. PREREQ: Nine credits of required courses.

**610 Thesis (3-6)** An expository thesis based on intensive study of a subject of contemporary interest. PREREQ: Approval and supervision by an appropriate faculty member.

**620 Research Thesis (3-6)** A research thesis presenting new and significant contributions to the field. Preparation as an undergraduate major in computer science is helpful. PREREQ: Approval and supervision by an appropriate faculty member.

## MATHEMATICS

Symbol: MAT

**503 History of Mathematics (3)** Development of mathematics from prehistoric time to present. Emphasis on changes in the mainstreams of mathematical thought through the ages.

**506 Fundamentals of Mathematics for Physics (3)** A critical examination of mathematics from the viewpoint of its physical applications.

**512 Modern Algebra (3)** For students with background deficiencies in algebra. Abstract mathematical systems studied include groups, rings, and fields. Offered in summer.

**513 Linear Algebra (3)** Vectors, vector spaces, determinants, linear transformations, matrices, and bilinear and quadratic forms. PREREQ: MAT 512 or equivalent.

**514 Theory of Numbers (3)** Elementary number theory and selected topics in analytic number theory.

**515 Algebra I (3)** Elements of abstract algebra, groups, commutative ring theory, modules, and associative algebras over commutative rings. PREREQ: MAT 512 or equivalent. Offered in fall of odd-numbered years.

**516 Algebra II (3)** A continuation of MAT 515. Vector spaces, representation theory, and Galois theory. PREREQ: MAT 515. Offered in spring of even-numbered years.

**517 Topics in Algebra (3)** Advanced algebraic theories. Homological algebra, algebraic geometry, and algebraic number theory. PREREQ: MAT 516.

**521 Discrete Mathematics and Graph Theory (3)** Techniques of problem solving, including the use of binomial coefficients, generating functions, recurrence relations, the principle of inclusion-exclusion, and Polya's Theorem.

**532 Modern Geometry (3)** Foundations of geometry. Axiomatics and the structure of a geometric system. Euclidean geometry from the standpoint of the Euclid and Hilbert postulates. Certain topics in projective and hyperbolic geometry.

**533 Projective Geometry (3)** An algebraic approach to projective geometry. Invariant theory, projective spaces, conics and quadratic forms, and subgeometries of real projective geometry.

**535 Topology (3)** Filters, nets, separation axioms, compactness, connectedness, and uniform spaces

**536 Algebraic Topology (3)** Algebraic topological invariants. Homotopy theory; simplicial, singular and Čech homology; and cohomology theories. PREREQ: MAT 516 and 535.

**541 Advanced Calculus (3)** For students with background deficiencies in analysis. Ordinary and uniform limits, sequences of functions; and the Riemann integral. Offered in summer.

**543 Topics in Differential Equations (3)** Advanced topics. Existence and uniqueness theorems, stability theory, singular points, and regular singular points. Sturm separation theorem and the "method of Liapunov."

**545 Real Analysis I (3)** A rigorous study of real-valued functions of real variables. PREREQ: MAT 541 or equivalent. Offered in the fall of even-numbered years

**546 Real Analysis II (3)** Continuation of MAT 545. PREREQ: MAT 545. Offered in the spring of odd-numbered years.

**570 Mathematical Models in the Life, Physical, and Social Sciences (3)** Techniques and rationales of model building. Applications to the life, physical, and social sciences.

**572 Proseminar (3)** Seminar in generating and solving problems in mathematics.

**575 Complex Analysis I (3)** A rigorous study of complex-valued functions of complex variables.

**576 Complex Analysis II (3)** Continuation of MAT 575. PREREQ: MAT 575.

**581 Methods of Applied Mathematics (3)** Vector analysis, complex analysis, Fourier analysis, and Sturm-Liouville Theory.

**583 Operations Research and Applied Mathematics (3)** Topics in applied mathematics. Linear and dynamic programming, game theory, extreme value problems, inventory, allocation, and queuing and search problems.

**595 Topics in Mathematics (3)** Topics announced at time of offering. PREREQ: Consent of instructor. Offered as needed.

**599 Independent Study (1-3)** Offered as needed.

**610 Thesis (3-6)** Offered as needed.

## MATHEMATICS EDUCATION

Symbol: MTE

**501 Fundamental Concepts of Mathematics I (3)** Selected topics that reflect the spirit and the content of the modern elementary school mathematics program. Logic, sets, functions, number systems, integers, number theory, rational numbers, and problem solving, including estimations and approximations, proportional thinking, and percentages.

**502 Fundamental Concepts of Mathematics II (3)** A continuation of MTE 501. The real number system, probability, statistics, geometry, measurement (including the metric system), and problem solving. PREREQ: MTE 501.

**504 Research in Mathematics Education (3)** Techniques of research in mathematics education. Analysis of types of research; selection of a problem; and formulation of a plan of investigation and report, including statistical analysis.

**505 Research Techniques in Mathematics Education (3)** Statistical principles in experimental design. General linear model correlation, regression, statistical inference, analysis of variance, and factorial designs. Critiques of current literature.

**507 Current Trends in Teaching Mathematics (3)** Philosophy, techniques, subject matter, and effectiveness of current secondary school mathematics courses examined against the changing character of American society and technology.

**508 Topics in Mathematics Education (3)** Topics announced in advance. Typical topics include teaching mathematics to the slow learner, methods of research in mathematical education, mathematics laboratories, and individualized instruction.

**509 Seminar in Mathematics Education (3)** Topics depend upon student interest. Student presentations required; informal discussion encouraged. Guests, including secondary school principals and mathematics curriculum coordinators, frequently participate.

**510 Algebra for the Elementary Teacher (3)**

An introduction to modern algebra. A comparative study of mathematics systems. PREREQ: MTE 501 or equivalent.

**530 Geometry for the Elementary Teacher**

**(3)** Basic concepts in geometry: Euclidean geometry and postulative systems. PREREQ: MTE 501 or equivalent.

**550 Topics in Mathematics for Elementary School Teachers (3)**

In-depth coverage of topics in mathematics introduced in grades K-8. Topics include number theory, probability, statistics, inequalities, and introduction to the computer. Emphasis among these and inclusion of additional topics depend on student preparation and need. PREREQ: MTE 501 or equivalent.

**551 Mathematics for the Disadvantaged (3)**

Examination of current programs in mathematics for the disadvantaged; discussion of the pertinent research literature; and development of materials and techniques for teaching the slow learner and low achiever.

**552 Materials for Teaching Secondary School Mathematics (3)**

Examination of available commercial materials for the teaching of mathematics. Creation of new and original materials for specific mathematical concepts and specific needs of class members.

**553 Teaching Elementary School Mathematics (3)**

In-depth treatment of strategies, methods, and materials for teaching the following concepts in an elementary classroom: place value; addition, subtraction, multiplication, and division of whole numbers; measurement, elementary number theory; geometry; fractions; and integers. PREREQ: MTE 501 or equivalent.

**554 Current Trends in Teaching Elementary School Mathematics (3)**

History and development of the modern elementary school mathematics programs. Theories and findings of recent and contemporary learning theorists are investigated. Modern organizational strategies surveyed, including team teaching, individualized instruction, open space, etc. Contemporary instruction strategies, such as individualized learning systems, mathematical laboratories, individually prescribed instruction, and are studied. PREREQ: MTE 501 or equivalent.

**556 Development of Mathematics Curricula in the Elementary Grades (3)**

For the development of a specialty in modern elementary school mathematics education. Curriculum development techniques, selection and analysis of materials, and individualization of instruction programs, techniques, and media. PREREQ: MTE 501 or equivalent.

**558 Teaching Mathematics in the Junior High School (3)**

Methods and materials for teaching the concepts of middle school and junior high school mathematics. Objectives are developed and serve as the basis for all course work. Current textbooks, achievement tests, and audio-visual materials are reviewed.

**560 Teaching Algebra in the Secondary School (3)**

Methods and materials for teaching the concepts of first- and second-year algebra. Emphasis on relevant applications to real-life situations. Objectives, along with criterion-referenced test items, are developed for pre-algebra, as well as for the two algebra courses. Current textbooks, achievement tests, and audio-visual materials on algebraic topics are reviewed.

**561 Calculus for Teachers (3)**

Analytic geometry of both the straight line and conics, and elements of the calculus of functions of a single real variable are reviewed. Topics include limits, continuity, the derivative and integral and their applications, curve sketching, and polar coordinates. Emphasis on methods of teaching these topics to secondary school students.

**562 The Laboratory Approach to Teaching Elementary School Mathematics (3)**

The materials-oriented approach to teaching elementary school mathematics, including cuisenaire rods, the geoboard, attribute games, tangrams, and multibase blocks. Emphasis on learners' participation in activities directly related to mathematics of the elementary school. Use of materials extends to all grade and ability levels.

**563 Use of the Mathematics Laboratory in the Secondary School (3)**

Laboratory investigations and their place in the curriculum. Planning laboratory investigations. Required facilities for the laboratory approach. Assessing the effectiveness of this approach with the low, average, and high achiever in the secondary school.

**564 Individualizing Instruction in Secondary School Mathematics (3)**

Analysis of current programs for individualizing instruction in secondary school mathematics (IDEA, PLAN, Nova, Research for Better Schools, and Coatesville Project). Analysis and development of an individualized instruction unit with performance objectives, criterion-referenced test items, media orientation, and appropriate tools for evaluation.

**567 Teaching Geometry in the Secondary School (3)**

Methods and materials for teaching the concepts of geometry in the secondary school. Emphasis on the development of relevant applications of the concepts of geometry in real-life situations.

**568 Seminar for Secondary School Mathematics Teachers (3)**

Selected topics of current interest in secondary school mathematics for the in-service teacher.

**569 Seminar for Elementary School Mathematics Teachers (3)**

Selected topics of current interest in elementary school mathematics for the in-service teacher.

**599 Independent Study (1-3)****610 Thesis (3-6)****STATISTICS**

Symbol: STA

**521 Statistics I (3)** For nonmathematics majors. Emphasis on applications to education, psychology, and the sciences. Distributions, measures of central tendency and variability, correlation, regression and hypothesis testing, and other topics.

**523 Mathematical Statistics I (3)** A rigorous treatment of probability spaces and an introduction to the estimation of parameters.

**524 Mathematical Statistics II (3)** Continuation of STA 523. Correlation, sampling, tests of significance, analysis of variance, and other topics. PREREQ: STA 523.

**525 Probability (3)** An advanced approach to the elements of probability. Discrete and continuous random variables, probability distributions, and sampling distributions.

**599 Independent Study (1-3)** Offered as needed.

**SERVICE COURSES IN MATHEMATICS AND COMPUTER SCIENCE****COMPUTER SCIENCE (CSC)**

**501** Introduction to Computers

**515** Introduction to Computer Programming

**550** Computers in Education

**MATHEMATICS EDUCATION (MTE)**

**501** Fundamental Concepts of Mathematics I

**502** Fundamental Concepts of Mathematics II

**510** Algebra for the Elementary Teacher

**530** Geometry for the Elementary Teacher

**550** Topics in Mathematics for Elementary School Teachers

**553** Teaching Elementary School Mathematics

**554** Current Trends in Teaching Elementary School Mathematics

**556** Development of Mathematics Curricula in the Elementary Grades

**558** Teaching Mathematics in the Junior High School

**560** Teaching Algebra in the Secondary School

**561** Calculus for Teachers

**562** The Laboratory Approach to Teaching Elementary School Mathematics

**563** Use of the Mathematics Laboratory in the Secondary School

**564** Individualizing Instruction in Secondary School Mathematics

**567** Teaching Geometry in the Secondary School

**568** Seminar for Secondary School Mathematics Teachers

**569** Seminar for Elementary School Mathematics Teachers

**STATISTICS (STA)**

**521** Statistics I

## Music

Dr. Edward A. Barrow, *Interim Dean*

Dr. Charles Price, *Graduate Coordinator*

The School of Music offers programs leading to the Master of Arts degree in music history and literature, and the Master of Music degree with concentrations in music education, performance, accompanying, music theory, or composition, and piano pedagogy. Course selections to meet degree requirements are made by candidates in consultation with their advisors and with consideration of the candidate's goals, abilities, needs, and interests.

### ADMISSION TO DEGREE PROGRAMS IN MUSIC

In addition to meeting basic University requirements, listed under Admission, applicants for degree programs are considered on the basis of academic record, interviews, and auditions.

Prior to enrollment **all applicants** must (1) possess appropriate undergraduate degrees and may be required to remedy not more than 12 credits of undergraduate deficiency if the undergraduate degree is not in the area of the intended graduate degree; (2) schedule interviews with the graduate coordinator and appropriate department chairperson in the School of Music; (3) take a placement examination in music theory and history. The tests are given the first week of each semester.

The areas of concentration, directed electives, and free electives are described fully in a student handbook compiled by, and available from, the graduate coordinator of the School of Music.

(**Note:** Auditions are required for degree programs in music performance.)

*Each degree candidate is individually responsible for satisfying degree candidacy and graduation requirements stated elsewhere in this catalog and for meeting deadline dates for the May, August, or December graduation, as appropriate.*

## Music Education

Dr. Belmain, *Chairperson*

### PROFESSORS

James R. Wells, Ed.D., *Columbia University*

### ASSOCIATE PROFESSOR

Carol Belmain, D.M.A., *Temple University*

### ASSISTANT PROFESSORS

Karen Markey, M.Ed., *West Chester University, Orff Certification, Levels I, II, III (DePaul University)*

Jane T. Pippart, M.Mu.Ed., *Holy Names College, Kodály Emphasis. Certificate, Liszt Academy (Budapest, Hungary)*

C. Floyd Richmond, M.M., *Delta State University*

### DEGREE REQUIREMENTS

#### MASTER OF MUSIC IN MUSIC EDUCATION

Students may choose either the thesis program of 30 semester hours or the nonthesis program of 34 semester hours (with

research, performance, or Orff-Schulwerk options). All programs require completion of nine credits in three core courses: MUE 500, 503, and 510. All students in M.M. programs in music education must also complete a comprehensive exit examination. Additional course requirements are:

**Thesis program:** Six credits in music education; three credits in music history; three credits in music theory; three credits in concentration electives; and six credits in research (MUE 691 and 699).

**Nonthesis program:** Six credits in music education; three credits in applied music; three credits in music theory; three credits in music history; three credits in free electives; three credits in concentration electives; four credits in research (MUE 691 and 692), or recital option (MUE 698 and VOI AIM/PIA 696). Candidates desiring to pursue the recital option in voice must audition before the voice jury and receive permission to pursue that option before earning 15 graduate hours or after completing VOI 543, whichever comes first.

**Orff-Schulwerk Concentration:** 15 credits in Orff-Schulwerk (MUE 530-35); three credits of music history; and seven credits of free electives.

### COURSE DESCRIPTIONS MUSIC EDUCATION

Symbol: MUE (unless otherwise shown)

#### 500 Methods and Materials of Research (3)

Basic techniques and procedures. Major types of research. Methods for locating, evaluating, and interpreting evidence. Preparation of a research outline.

#### 503 Philosophical Foundations of Music Education (3)

Historical and philosophical foundations of music education. Application of principles of education to music. Major emphasis on development of a philosophy of the discipline.

#### 510 Current Trends in Music Education (3)

Present practices and emerging developments in music education.

#### 511 Vitalizing Music in the Elementary School (3)

Study of song series, instruments,

and materials in current use in the elementary classroom.

#### 512 Teaching Music Listening at the Elementary Level (3)

For the elementary classroom and music teacher. Teaching elements of music and musical concepts, and developing aesthetic sensitivity through listening

#### 513 Music Education in the Elementary School (3)

For the music educator. Problems, procedures, and materials in the elementary school classroom. PREREQ: Elementary music methods and teaching experience.

#### 514 Music Education in the Secondary School (3)

The music curriculum in the secondary school. Emphasis on conceptual learning, structured curriculum, independent study, aesthetic experience, and current materials. PREREQ: Secondary school music methods and teaching experience.

#### 516 Administration and Supervision of School Music (3)

Administrative problems, curricular content and scheduling, in-service training of teachers, and specialized supervisory techniques for the music curriculum. PREREQ: Teaching experience.

**517 Psychology of Music (3)** In-depth study of learning theories as related to music education and the nature of music.

#### 520 Classroom Materials for Music Programs (3)

Evaluation of the newest materials for music education.

**522 Music in the Middle School (3)** Review and critical analysis of music education in the middle school; philosophies, curriculum, practices, and personnel

**525 Elementary Kodaly Techniques (3)** Basic Kodaly techniques. Adaptation of teaching procedures for elementary school: rhythm, melody, movement, and improvisation

**526 Intermediate Kodaly Techniques (3)**

Continuation of MUE 525. PREREQ: MUE 525.

**527 Projects to Individualize Music Classes**

(3) Evaluating learners and prescribing meaningful modes of instruction for individuals and small groups.

**528 Music in Special Education (3)** Characteristics of special pupils, adaptation of teaching techniques, materials curriculum.

**529 Dalcroze Eurhythmics (3)** A pedagogical approach to the study of enacting musical meanings in physical space. Refining the sensing, analyzing, and improvising of musical concepts by understanding how music is produced.

**530 Orff-Schulwerk — Level I (1-4)** Designed to develop fundamental Orff processes through the acquisition of basic musical skills, soprano recorder techniques, and movement concepts. Level I is limited to pentatonic activities (credit placement determined through advisement).

**531 Orff-Schulwerk — Level II (4)** Designed to develop a theoretical comprehension of the evolution of elemental music through the Baroque period. Liturgical and diatonic modes are used as vehicles in developing harmonic concepts. PREREQ: MUE 530 or Level I Orff Certification from an AOSA accredited program. Admission to program by audition.

**532 Orff-Schulwerk — Level III (4)** Designed to develop comprehension of 20th century styles, and theoretical and performance

practices of Western and non-Western music, while using both ethnic and popular means. PREREQ: MUE 531.

**533 Orff-Schulwerk: Recorder Ensemble (1)**

A culmination of recorder instruction, through performance, analysis, and discussion, into a survey of repertoire suitable for recorder consort and consort with subordinate instruments. PREREQ: MUE 531. Open, as an elective, to students demonstrating playing proficiency on soprano and alto recorder. Admission by audition.

**534 Orff-Schulwerk: Movement (1)** An in-depth study to develop visual and spatial awareness, coordination and body control, imagination, improvisation, and kinesthetic understanding of musical elements as they interact within the Schulwerk process. PREREQ: MUE 531. Open, as an elective, to students demonstrating proficiency in creative movement, improvisation, and ethnic dance. Admission by audition.

**535 Orff-Schulwerk: Instrumentarium**

**Practicum (1)** A survey of works by Carl Orff and Gunild Keetman, as well as selected materials arranged for the instrumentarium which require advanced performance skills. PREREQ: MUE 531. Open, as an elective, to students demonstrating playing proficiencies using basic techniques on unpitched and pitched instruments, as well as improvisational skills. Admission by audition.

**536-539 Workshops (1-3)** Participation-

oriented workshops designed to meet specific needs in music and music education and to develop skills for practical application in school and professional settings. (The prefixes that apply only to these workshops are MWE, Music Education, MWI, Handbells, MWK, Kodaly, MWO, Orff.)

**550 Related Arts Pedagogy in Music Educa-**

**tion (3)** Historical background of the related-arts movement. Principles of related-arts teaching related to musical elements, forms, and styles, with appropriate teaching techniques at specified grade levels. Materials for school music programs: basal music series, other texts and literature, and resources in related arts. Demonstration lessons and unit planning

**679 Special Subjects Seminar (1-3)** Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group

**681-83 Independent Study in Music (1-3)**

Individual research under the guidance of a faculty member. PREREQ: Permission of instructor.

**691 Research Seminar in Music (2)** A research proposal with supporting procedures is developed. Guidance in individual research topics, with tutorial assistance in form and style of research writing.

**692 Research Report (2)****698 Performance Research (1)****699 Thesis (4)**

## Music History

Dr. Schmidt, *Chairperson*

### PROFESSORS

Sterling E. Murray, Ph.D., *University of Michigan*

Liselotte M. Schmidt, Ed.D., *Columbia University*

### ASSOCIATE PROFESSOR

Charles G. Price, Ph.D., *Stanford University*

### ASSISTANT PROFESSOR

Thomas Winters, Ph.D., *University of Pennsylvania*

**Music History applicants** must (1) schedule an interview with the graduate coordinator and the chairperson of the

Department of Music History and (2) be tested in the reading knowledge of a foreign language, preferably French or German. Students found lacking in a reading skill in a foreign language must eliminate this deficiency before admission to degree candidacy.

### DEGREE REQUIREMENTS

#### MASTER OF ARTS IN MUSIC HISTORY

(30 semester hours)

Fifteen credits in five courses offered by the Department of Music History (three must be chosen from MHL 640-645); six credits in research and bibliography (MHL 670 and MHL 699); nine credits in electives (music and related disciplines), defense of thesis serves as comprehensive exit examination.

### COURSE DESCRIPTIONS

#### MUSIC HISTORY AND LITERATURE

Symbol: MHL

**510 Collegium Musicum (1)** A chamber ensemble specializing in the use of authentic instruments and performance techniques in the music of the Medieval, Renaissance, and Baroque eras. Open by audition

**620 World Music (3)** An introduction to the study of tribal, folk, popular, and oriental music and ethnomusicological methodology. Open to music majors and nonmusic majors without prerequisites

**622 History of Jazz (3)** A survey of the history of jazz, including representative performers and their music.

**640 Medieval Music (3)** Development of plainsong and secular monody, and beginnings and early history of polyphony to the 14th century. Consideration of contemporary trends in the visual arts, history, and literature.

**641 Renaissance Music (3)** Sacred and secular music in the Age of Dufay, changing forms and styles through the music of the Franco-Flemish groups; the frottola and related forms, and Palestrina and his contemporaries. Brief consideration of contemporary trends in the visual arts, history, and literature

**642 Baroque Music (3)** Styles and forms of the European repertoire, contributions of the major composers, and the role of music and musicians in the society of the period

**643 Late 18th Century Music (3)** Changing styles and forms in the sons of J.S. Bach, the Viennese preclassicalists, the Mannheim School, opera, Joseph and Michael Haydn, Mozart, and their contemporaries, and the early works of Beethoven

**644 19th Century Music (3)** Historical developments during the Romantic Period (ca. 1800-1900). Analysis of changes and trends, and comparative aspects of new forms

**645 20th Century Music (3)** Chronological survey of 20th century music. Development of styles. Technical aspects of changes occurring in melody, rhythm, orchestration, texture, tonality, and form

**651 Music in the United States (3)** Analysis of

music and musical trends in America from the Pilgrims to the present.

**654 History of Opera (3)** The composers and their major contributions to the various schools of opera. PREREQ: Six credits of music history.

**655 History of Orchestral Music (3)** How the symphony orchestra developed from the Baroque Period to the present in its function, literature, instrumentation, and performance practices.

**656 History of Musical Instruments (3)** The development of musical instruments from antiquity to the 20th century. A world view of instruments will include function and performance practice.

**657 History of Chamber Music (3)** The history, forms, and changing styles and media of chamber music from the sixteenth century to the present. Principal composers are studied.

**658 Performance Practices (3)** A consideration of the special problems encountered in the stylistic realization and performance of music from the Medieval through the Romantic eras. Particular attention will be focused on original sources, period instruments, and performance problems. PREREQ: MHL 221 and 222 or permission of the instructor.

**660 Bach and His Works (3)** The life of J. S. Bach. A study of his works for organ, keyboard, and other instruments, plus cantatas and larger choral works.

**661 Beethoven and His Works (3)** The life and times of Ludwig van Beethoven. Consideration of orchestral, chamber, and vocal music, emphasizing chronological stylistic development. Consideration of Beethoven's influence on the later 19th century.

**662 Mozart and His Works (3)** A study of the life and music of Wolfgang A. Mozart with

special reference to the period in which he lived.

**670 Research in Music History (3)** Bibliographical materials and research methods. Ability to read at least one foreign language required.

**679 Seminar in Music History I (1-3)** Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

**680 Seminar in Music History II (1-3)** Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

**681-83 Independent Study in Music History (1-3)** Individual research under the guidance of a faculty member. PREREQ: Permission of instructor.

**699 Thesis in Music History (3)**

## Instrumental Music

Dr. Barrow, *Chairperson*

### PROFESSORS

Edward A. Barrow, Ph.D., *West Virginia University*

Kenneth L. Laudermilch, D.M.A., *Catholic University of America*

### ASSOCIATE PROFESSORS

Sylvia Moss Ahramjian, M.M., *Indiana University*

Richard A. Boerlin, M.S., *University of Illinois*

Terry E. Guidetti, M.Mus., *Northwestern University*

Ted Hegvik, M.M., *University of Michigan*

Eugene Klein, M.M.E., *Indiana University*

H. Lee Southall, M.A., *Trenton State College*

### ASSISTANT PROFESSORS

Carol Isaacson-Briselli, M.M., *Temple University*

Glenn Lyons, M.Mus., *Peabody Conservatory of Music*

Owen Metcalf, D.M., *Indiana University*

Emily Newbold, D.M.A., *Combs College*

Jane Richter, D.M.A., *Combs College*

### COURSE DESCRIPTIONS INSTRUMENTAL MUSIC

**INDIVIDUAL LESSONS:** Prefixes. BAR, BAS, BSN, CLT, FLU, FRH, GTR, HRP, OBO, PER, SAX, TBA, TPT, TRB, VCL, VLA, VLN

**501-02 Lessons at the Minor (beginning) Level (1)**

**511-14 Lessons at the Major Level (1)**

**541-45 Lessons at the Advanced Level (2)**

For performance majors only.

**AEB 511 Marching Band (1)**

**AEB 521 Concert Band (1)**

**AEB 531 Symphonic Band (1)**

**AEB 541 Wind Ensemble (1)**

**AEO 531 Chamber Orchestra (1)**

**AEO 541 Symphony Orchestra (1)**

**AES 511 Recital-Instrumental Ensemble (2)**  
Program selection, recruitment of players,

rehearsal, and performance of music for small instrumental ensembles

**AIC 512 Advanced Instrumental Conducting (2)** PREREQ: Undergraduate conducting.

**AIM 511 Marching Band Techniques and Materials (3)** A survey of the function of the total marching band and of each component in the band.

**AIM 679-80 Special Subjects Seminar-Instrumental (1-3)** Instrumental music topics presented by faculty and/or visiting lecturers.

**AIM 681-83 Independent Study in Music (1-3)**  
**AIM 696 Recital-Instrument (2)** For music education majors in lieu of research report. PREREQ: Jury exam.

**AIM 697 Recital-Instrument (2)** For performance majors. PREREQ: Jury exam.

**INSTRUMENTAL LITERATURE COURSES:** A survey of solo, ensemble, and teaching literature

through performance and the use of scores and recordings.

**ALC 511 Brass Literature (3)**

**ALC 531 String Literature (3)**

**ALC 541 Woodwind Literature (3)**

**ALC 551 Instrumental Literature (3)**

**MASTER CLASSES:** Performance techniques and stylistic interpretation of instrumental solo works. PREREQ: Performance ability at the major level.

**AMC 511 Master Class-Brass (1-3)**

**AMC 521 Master Class-Percussion (1-3)**

**AMC 531 Master Class-Strings (1-3)**

**AMC 541 Master Class-Woodwind (1-3)**

**MWB 536-39 Marching Band Workshop (1-3)**

A comprehensive marching band conference for the total marching band program. Foremost authorities offer instruction in their fields of specialization.

## INSTRUCTORS

Joseph A. Goebel, Jr., B.S., *Millersville University*

Peter Paulsen, B.Mus., *West Chester University*

John Villella, M.Mus., *West Chester University*

Larry McKenna

### REQUIREMENTS FOR ADMISSION

In addition to the general requirements for admission to degree programs in music, instrumental performance applicants must (1) schedule an interview with the graduate coordinator and the department chairperson, (2) submit a repertoire list, and (3) demonstrate performance ability at an advanced level by performing for an audition committee.

### DEGREE REQUIREMENTS

#### MASTER OF MUSIC IN INSTRUMENTAL PERFORMANCE

(30 semester hours)

**Instrumental Concentration:** Ten credits in individual lessons at the advanced level (XXX 541-45) and Recital (AIM 697); AEC 511; 5-6 concentration credits (selected from AIC 512, and ALC 511, 531, and 541 or 551); three credits in music history; three credits in music theory; 4-5 credits of free electives; and completion of a comprehensive exit examination.



## Keyboard Music

Prof. Pandel, *Chairperson*

### PROFESSORS

Robert E. Pennington, D.Mus., *Northwestern University*

Robert Schick, A.Mus.D., *Eastman School of Music*

Richard K. Veleta, D.Mus., *Northwestern University*

Jacques C. Voois, D.M.A., *Johns Hopkins University Peabody Conservatory of Music*

### ASSOCIATE PROFESSORS

Shirley T. Aliferis, M.Mus., *Indiana University*

Robert M. Bedford, D.Mus., *Catholic University*

Robert C. Lucas, Ed.D., *Teachers College, Columbia University*

Praxiteles Pandel, M.S., *The Juilliard School*

W. Benjamin Whitten, M.Mus., *Peabody Conservatory of Music*

### ASSISTANT PROFESSOR

Richard W. Fields, M.M., *The Juilliard School*

The Department of Keyboard Music offers three programs leading to the Master of Music. Students may concentrate in performance (piano, harpsichord, or organ), accompanying, or piano pedagogy.

**Performance applicants** must (1) schedule an interview with the graduate coordinator and the chairperson of the keyboard department; (2) submit a repertoire list; and (3) demonstrate performance ability at an advanced level by performing for an audition committee.

**Accompanying applicants** must (1) schedule an interview with the graduate coordinator and the chairperson of the keyboard department; (2) submit transcripts showing completion of a bachelor's degree in music, including six semester hours of a foreign language (French, German, or Italian preferred); and (3) demonstrate accompanying ability at an advanced level by performing for an audition committee.

**Piano Pedagogy applicants** must (1) schedule an interview with the graduate coordinator and the keyboard department chairperson, and (2) schedule an entrance examination, which will consist of scales, arpeggios, solo repertoire from various stylistic periods, and sight reading. Applicants whose undergraduate degrees are not in music may be accepted into this program if they demonstrate equivalent background in piano.

### DEGREE REQUIREMENTS

#### MASTER OF MUSIC IN KEYBOARD PERFORMANCE

All programs require completion of three semester hours each in music history and in music theory, as well as one of the concentrations described below. In addition, all students must complete a comprehensive exit examination.

(30 semester hours)

**Piano/Harpsichord Concentration:** ten credits in individual lessons at the advanced level (PIA/HAR 541-45); six credits in keyboard literature (PIA 601-04, 611); 2-3 credits of concentration electives; three credits of free electives; and recital (PIA 697).

(30 semester hours)

**Accompanying Concentration:** four credits in individual lessons at the advanced level (PIA 570-71); eight credits of Ensemble (PIA 574-75); eight credits in cognate courses (PIA 572-73, 576-77); and three credits in free electives (VOC 511-14, VOC 515-16 preferred).

(30 semester hours)

**Organ Concentration:** ten credits in individual lessons at the advanced level (ORG 541-45); six credits in organ literature (ORG 551-52); ORG 561-62; three credits of free electives; and recital (PIA 697).

(30 semester hours)

**Piano Pedagogy Concentration:** four credits in individual lessons (PIA 578-79); 16 credits in piano pedagogy (PIA 580-83); six credits in keyboard literature (PIA 601-04, 611); and 3-6 credits of supportive work in methodology, psychology, or philosophy of education (selected from the Departments of Music Education, Childhood Studies and Reading, Psychology; or Counselor, Secondary, and Professional Education).

(35 semester hours)

### COURSE DESCRIPTIONS

#### KEYBOARD MUSIC

Symbol: PIA, ORG, KEN, MAK, HAR, MWP

#### 501-2 Individual Lessons at the Minor Level in Piano, Organ, and Harpsichord (1)

Individual, half-hour lessons once weekly. An elective course for all graduate students.

#### 511-14 Individual Lessons at the Major Level in Piano, Organ, and Harpsichord (1)

Individual half-hour lessons. Continued study in the development of repertoire and performing skills. Students may be given permission to register for two course numbers in the same semester, earning the second credit by doing additional outside work and performing in a recital. PREREQ. Completion of the performance major requirements at the undergraduate level or admission by audition.

**525 Piano Technique (3)** An exploration of the many approaches to acquiring and teaching piano technique, the correlation between technique and musical style, and how to practice and analyze physiological movements.

#### 541-45 Individual Lessons at the Advanced Level in Piano, Organ, and Harpsichord (2)

Individual, half-hour lessons once weekly. Advanced studies leading to a full-length recital at the master's level. PREREQ. Completion of the performance major requirements for the Bachelor of Music degree or admission by audition.

#### MWP 536-539 Piano Workshop (1-3)

**MWS 536-39 Contemporary Applications of Keyboard Synthesizers (3)** A hands-on workshop involving programming techniques for synthesizers and the study of MIDI networks. Performance and composition will be emphasized.

**KEN 546 Keyboard Ensemble (2)** Performance of duet and two-piano literature.

**ORG 551 Organ Literature I (3)** A survey of literature for the organ from the 13th century to the Baroque Period. The influence of the organ on the literature. Recordings and performance by organ majors.

**ORG 552 Organ Literature II (3)** A survey of literature for the organ from J.S. Bach to the

present. The influence of the organ on the literature. Recordings and performance by organ majors.

#### MAC 558 Master Class (Organ) (1-2)

**MAK 558 Master Class (Keyboard) (1-2)** Weekly performance sessions for advanced students.

**ORG 561 Accompanying (Organ) (3)** Performance of vocal and instrumental accompanying literature for organ from all periods. Performance and reading sessions.

**ORG 562 Service Playing (Organ) (3)** A survey of problems in service playing for the organist. Hymn accompaniment, improvisation, conducting from the organ, and literature for the service. Observation of service playing when possible.

**570-71 Individual Lessons at the Advanced Level for Accompanists (2)** Individual, half-hour lessons once a week to train pianists in playing accompaniments. PREREQ. Admission to the M.M. concentration in accompanying.

**572-73 Accompanying I, Vocal; II, Instrumental (3)** Survey of accompanying literature



(I) art songs, recitatives, cantata, opera, and oratorio arias; and (II) strings, winds, and brass. Performance and reading in class.

**PIA 574-75 Ensemble I, II (4)** Accompanying in teaching studios for large groups (choruses), for various ensembles (including trios and quartets), and for faculty, B.M., M.M., general, and senior student recitals.

**576 Harpsichord and Continuo Realization (1)** An introduction to harpsichord playing and the principles of continuo realization.

**577 Transposition and Score Reading (2)** Training in score reading and transposition at the keyboard.

**578 Individual, half-hour lessons for students of piano pedagogy (2)** PREREQ: Admission to the pedagogy concentration

**579 Individual, half-hour lessons for students of piano pedagogy (2)** Includes presentation of a full or half recital of concert works or pedagogical pieces, or a lecture-recital.

**580 Group Piano Pedagogy I (4)** Procedures and materials for group piano instruction from preschool through beginning levels. Emphasis on developing musical literacy and creativity through peer learning and group interactions. Includes practicum in group piano instruction.

**581 Group Piano Pedagogy II (4)** Procedures and materials for group instruction from the intermediate through advanced levels. Emphasis on developing comprehensive musicianship through an interwoven study of literature, musical analysis, technique, improvisation, ear

training, harmony, transposition, and sight reading. PREREQ: PIA 580.

**582 Piano Pedagogy I (4)** An in-depth study of repertoire and materials available to the studio piano teacher for the beginning and intermediate levels. Discussions of related concerns, such as memorization, practice techniques, developing technique through literature, principles of fingering, and sight reading. Includes practicum in individual instruction.

**583 Selected Topics in Piano Pedagogy (4)** Further exploration of the goals and objectives of piano study through presentation of selected topics and continued practicum in individual instruction.

**601 Baroque Keyboard Literature (3)** The Renaissance through development of variation form and dance suite. Emphasis on performance practices, realizing ornament signs and figured basses, transferral to the modern piano; in-depth study of works of Handel, J.S. Bach, and D. Scarlatti. Some student performance required.

**602 Classical Piano Literature (3)** Literature for the early piano (1750-1830). Origin and development of the sonata and performance practices of homophonic style. Music of the sons of Bach, Haydn, Mozart, and Beethoven. Sound and structure of the early piano. Some student performance required.

**603 Romantic Piano Literature (3)** Analysis of piano styles of Schubert, Chopin, Mendelssohn, Schumann, Liszt, Brahms, Faure, Mussorgsky, Tchaikovsky, and Grieg. Performance practices. The virtuoso etude and problems of technical

execution. Some student performance required. PREREQ: PIA 426 (Keyboard Literature II) or equivalent.

**604 20th Century Piano Literature (3)** Seminal works and styles of this century. Albeniz, Rachmaninoff, Debussy, Ravel, Prokofiev, Hindemith, Schoenberg, Bartok, and American composers. Some student performance required. PREREQ: MTC 213 (Theory of Music IV) or equivalent.

**608 The Music of Chopin (3)** A comprehensive study of the contributions of Frederic Chopin to keyboard literature.

**611 The Piano Concerto (3)** A chronological presentation of the development of the piano concerto; performances, problems and practices will be emphasized. Covers from J.S. Bach to present.

**679-680 Special Subjects Seminar (1-3)** Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

**681-683 Independent Study in Music (1-3)**

**696 Recital (1)** A shared (half) recital open to candidates for the Master of Music degree (music education concentration). In lieu of research report. Program notes required. PREREQ: Approval by committee examination.

**697 Recital (2)** A full public recital, demonstrating an understanding of various performance styles and an ability to perform literature from several periods. Required of candidates for the Master of Music in applied music. PREREQ: Approval by committee examination.

## Music Theory and Composition

Prof. Gangemi, *Acting Chairperson*

### PROFESSORS

James E. McVoy, Ph.D., *Eastman School of Music*

Larry A. Nelson, Ph.D., *Michigan State University*

James D. Sullivan, Ph.D., *Eastman School of Music*

### ASSOCIATE PROFESSORS

Charles D. Gangemi, M.A., *University of Pennsylvania*

### REQUIREMENTS FOR ADMISSION

Theory and/or composition applicants must: (1) schedule an interview with the graduate coordinator and a faculty committee appointed by the chairperson of the Department of Music Theory and Composition; and (2) demonstrate sufficient pianistic ability, sight singing, and aural perception to meet the demands of the

program. In addition, composition applicants must submit original works showing technical facility in composition.

### DEGREE REQUIREMENTS

#### MASTER OF MUSIC IN THEORY

(30 semester hours)

Three credits in music history; 15 credits in music theory (selected from MTC 512, 517, 541, 544, 546 and 563); six credits in concentration electives; three credits of free electives; three credits of thesis (MTC 697). The thesis defense serves as a comprehensive exit examination.

#### MASTER OF MUSIC IN COMPOSITION

(30 semester hours)

Three credits in music history; MTC 512, 513, and 514 (nine credits); 12 credits in music theory, selected from MTC 515, 516, 517, 541, 542, 544, 545, 546, 550, 552, 554, 563, and 564; three credits of free electives; and three credits of thesis (MTC 699). The thesis defense serves as the comprehensive exit examination.

### COURSE DESCRIPTIONS

#### MUSIC THEORY AND COMPOSITION

Symbol: MTC (unless otherwise indicated)

**512-14 Advanced Composition I, II, and III (3)** Free composition in larger forms for ensembles, solo voice and chorus, chamber groups, and orchestra. PREREQ: MTC 213 (Theory of Music IV) or equivalent.

**515 Serialism and Atonality (3)** Composi-

tional procedures and theoretical concepts in atonal and serial work of Schoenberg, Berg, Webern, Bartok, Stravinsky, and more recent composers. PREREQ: MTC 213 (Theory of Music IV) or equivalent.

**516 Jazz Practices (2-3)** Jazz history, writing, and performance. Survey of basic jazz literature; fundamental techniques in arranging and improvising. PREREQ: MTC 212 (Theory of Music III) or equivalent

**517 Electronic Music (3)** Materials and techniques of electronic music and their use in composition. Laboratory experience in the composition of electronic music. PREREQ: Permission of the instructor

**MWJ 536-39 Jazz Studies Workshop (1-3)** A workshop for the study and performance of jazz. Arranging and ensemble performance opportunities. A separate brochure describes summer workshops.

**540 Advanced Band Arranging (3)** Emphasis on arranging for school bands. Consideration given to bands with inexperienced performers and limited instrumentation. PREREQ: Teaching experience and a knowledge of orchestration

**541 Advanced Orchestration (3)** Original composition of arrangement for orchestra. PREREQ: A knowledge of the instruments of the orchestra and experience in their use.

**542 Advanced Musical Form (3)** A detailed study of musical form, with emphasis on modifications of sonata form, vocal and instrumental forms of Baroque music, and forms that are unique.

**544 Advanced Counterpoint I (3)** Contrapuntal techniques of the 18th century. Chorale prelude and invention.

**545 Advanced Counterpoint II (3)** Continuation of MTC 544. Includes the canon, invertible counterpoint, and fugue. PREREQ: MTC 544 or permission of the instructor

**546 Techniques of Early 20th Century Music (3)** A study of compositional techniques in representative vocal and instrumental works of the first two decades of this century.

**550 Acoustics of Music (3)** The study of sound; its production, transmission, and reception. Musical instruments, the acoustics of rooms, and the physical basis of scales.

**552-53 Pedagogy of Music Theory I-II (3)** Techniques and materials for teaching music theory. MTC 552 is not a prerequisite to MTC 553.

**554 Modal Counterpoint I (3)** Use of modes, musica, ficta, and cadences in 16th-century music. Experience in imitation in two parts, using all note values; double counterpoint, and pronunciation and setting of Latin texts.

**555 Modal Counterpoint II (3)** Continuation of MTC 554. Writing in three and more voices. PREREQ: MTC 554

**561 Jazz Harmony and Arranging (3)**

**562 Advanced Jazz Harmony and Arranging (3)** A study of improvisation and arranging, literature, and other aspects of an important phase of popular styles.

**563 Seminar in Music Theory (2)** Intensive work in selected areas of music theory. Guidance in individual projects leading to significant current developments in theory. PREREQ: Permission of the chairperson of the Department of Theory and Composition

**564 Performance Practices in Contemporary Music (3)** This course will provide the following opportunities: (1) the participants will study technical problems of understanding new notation (e.g., graphic scores, proportional scores, multiphonics, microtones, metric

modulation, asymmetrical rhythm groupings, prose scores, etc.), and will develop a reasonable facility in performing scores that include these techniques; (2) an ensemble for which composition students may compose; and (3) the establishment of an ensemble, which may publicly perform new music

**591 Advanced Chromatic Harmony (3)**

**592 Advanced Ear Training (2)**

**679 Special Subjects Seminar (1-3)** Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

**681-83 Independent Study in Music (1-3)**

Individual research under the guidance of a faculty member. PREREQ: Permission of instructor.

**691-92 Research Seminar in Music (1-2)** A research proposal with supporting procedures is developed. Guidance in individual research topics with tutorial assistance in form and style of research writing.

**697 Theory Thesis (3)** For graduate majors in theory only.

**698 Research Report (1)**

**699 Musical Composition Thesis (3)** For graduate majors in composition only.

## Vocal and Choral Music

Prof. Alt, *Chairperson*

### ASSOCIATE PROFESSORS

Lois V. Alt, M.Mus., *University of Michigan*

W. Larry Dorminy, D.Mus., *Indiana University*

Raymond Friday, Ph.D., *New York University*

Joy Vandever, M.Ed., *West Chester University*

G. Alan Wagner, M.F.A., *Carnegie-Mellon University*

Lois M. Williams, M.A., *Columbia University*

### ASSISTANT PROFESSORS

Kathryn Chilcote, M.M., *Conservatory of Music, University of the Pacific*

David Sprenkle, D.M.A., *University of Maryland*

Rebecca Taylor, M.Mus., *University of Texas at Austin*

Jane Wyss, D.M.A., *University of Texas at Austin*

### COURSE DESCRIPTIONS

#### VOCAL-CHORAL

Symbol: CHO

**511 Masterworks Chorus (1)** A large, all-class, mixed chorus presenting oratorios, masses, and advanced level choral literature. By audition.

**611 Chamber Choir (2)** A consort of 15-25 singers specializing in the performance of sacred and secular vocal music of the Renaissance and early Baroque periods. By audition.

**612 Concert Choir (1)** A mixed chorus of 35-45 singers performing sacred and secular choral literature of all periods and styles. By audition.

Symbol: VOC

**511 Master Class — Baroque (1)** Discussion and performance of songs from the Baroque period

**512 Master Class — German Lied (1)** Discussion and performance of the German art song

**513 Master Class — French Melodie (1)** Discussion and performance of the late French art song

**514 Master Class — 20th Century Art Song (1)** Discussion and performance of art songs from the 20th century.

**515 English-Italian Diction (3)** English,

### REQUIREMENTS FOR ADMISSION

**Voice applicants must:** (1) demonstrate advanced performance ability; (2) audition with a program including selections drawn from Italian art song, German *Lied*, French *melodie*, opera, and oratorio; (3) demonstrate diction competency in Italian, German, and French; (4) submit a repertoire list; and (5) schedule an interview with the graduate coordinator and the department chairperson. Students lacking nine credits of undergraduate foreign language must remove this deficiency before candidacy.

### DEGREE REQUIREMENTS

#### MASTER OF MUSIC IN VOCAL PERFORMANCE

(30 semester hours)

The program requires completion of three credits in music history and three credits in music theory, as well as the concentration described below.

**Voice Concentration:** ten credits in individual lessons at the advanced level (VOI 541-45) and a recital (VOI 697); VOC 524 (three credits); 4-6 credits (selected from VOC 511-16, 526, 529, 546, 591, and 612, and MHL 654).

Italian, and Latin diction in a laboratory course to establish correct pronunciation in singing. The phonetics of these languages are used in selected song repertoire.

**516 French-German Diction (3)** French and German diction in a laboratory course to establish correct pronunciation in singing. The phonetics of these languages are used in selected song repertoire.

**524 Musico-Dramatic Production (3)** Techniques of producing musical plays. Preparing for roles, coaching, and conducting rehearsals. May lead to a public performance of the material studied.

**526 Choral Literature (3)** Representative examples of choral music from the various musical periods. Primarily the larger works for chorus are used.

**529 Vocal Literature (3)** Classic song literature, lieder, melodie, and contemporary art songs are discussed.

**536-39 Vocal-Choral Workshops (1-3)** Participation-oriented workshops designed to meet specific needs in vocal-choral music.

**546 Vocal Ensemble (2)** Self-study in the performance and preparation of small ensembles. Project must have the approval of the department chairperson.

**591 Vocal Pedagogy (3)** Principles and techniques of teaching voice.

**612 Advanced Choral Conducting (2)** Study and application of choral conducting techniques. PREREQ: VOC 312 or permission of instructor

**679-80 Special Subjects Seminar (1-3)** Significant topics presented by faculty or visiting lecturers.

**681 Independent Study (1)**

**682 Independent Study (2)**

**683 Independent Study (3)**

**691 Research Seminar in Music (2)**

**692 Research Seminar in Music (1)**

Symbol: VOI

**501-02 Individual Lessons at the Minor Level (1)** An elective course for graduate students.

**511-14 Individual Lessons at the Major Level (1)** A course for voice majors in the Master of Music in music education program. PREREQ: Completion of the undergraduate voice major requirements or by audition.

**541-45 Individual Lessons at the Advanced Level (2)** Advanced vocal studies culminating in a full master's recital. PREREQ: Completion of the performance requirements for the Bachelor of Music in voice program or admission by audition.

**696 Recital (1)** A shared (half) public recital for

candidates in the Master of Music Education program in lieu of a research report. Candidate must write approved program notes. PREREQ: Approval by the examination committee.

**697 Recital (2)** A full public recital demonstrating an understanding of various performance styles and the ability to perform. Required of candidates for the Master of Music in Voice degree. PREREQ: Approval by the examination committee.

Symbol: VOW

**521 The Broadway Musical (3)** This course surveys the American musical theatre, past and present. It is activity-oriented as it surveys all elements of producing the American musical in school or other amateur settings.

**522 The Musical Revue (3)** This course explores the concept of choral music in motion and will teach the necessary techniques and skills for mounting a successful choral ensemble show. Participants will leave the course with a full revue entirely staged and developed.

## Philosophy

103 Main Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2841

Dr. Claghorn, *Chairperson and Coordinator of Graduate Studies*

### PROFESSORS

George S. Claghorn, Ph.D., *University of Pennsylvania*  
W. Stephen Croddy, Ph.D., *Brown University*  
Thomas W. Platt, Ph.D., *University of Pennsylvania*  
Stanley Riukas, Ph.D., *New York University*  
Paul A. Streveler, Ph.D., *University of Wisconsin*  
Frederick R. Struckmeyer, Ph.D., *Boston University*

### ASSISTANT PROFESSOR

Frank J. Hoffman, Ph.D., *University of London*

The Department of Philosophy offers a program leading to the Master of Arts in philosophy. This degree will serve as a foundation for studies leading to a Ph.D. in philosophy or prepare students for positions in industry, government, or college teaching.

#### Admission to the Program

In addition to meeting general requirements for admission to a

degree program at West Chester, applicants must present a minimum of 12 semester hours of undergraduate philosophy, including courses in history of ancient philosophy, history of modern philosophy, ethics, and logic.

#### Foreign Language Requirement

Candidates for the M.A. must demonstrate a reading proficiency in French, German, or Spanish.

#### Final Examination Requirement

A comprehensive, written final examination is required. This will cover four fields: (1) metaphysics; (2) any two from logic, ethics, aesthetics, philosophy of language, philosophy of science, or American philosophy; and (3) any agreed-upon philosopher, such as Plato, Aquinas, Kant, or Wittgenstein.

#### MASTER OF ARTS IN PHILOSOPHY

(30 semester hours)

All candidates are required to take PHI 599 and PHI 640. Beyond these requirements, the student has the choice of a thesis or nonthesis program.

The thesis program requires 18 semester hours in philosophy; 6 semester hours of electives, chosen from philosophy or related courses; and the thesis (PHI 610), which accounts for six semester hours.

The nonthesis program specifies 24 semester hours in the philosophy concentration and 6 semester hours of electives (philosophy or related).

### COURSE DESCRIPTIONS PHILOSOPHY

Symbol: PHI

**506 Meaning in Language (also LIN 506) (3)** A discussion of topics having to do with meaning in everyday oral communication.

**512 Ethical Theories (3)** Examination of various ethical theories with practical applications to such problems as authority, punishment, rights, marriage, and race.

**513 Aesthetic Theories (3)** History of aesthetics, as seen in classic interpretations. Psychological and sociological origins of art; the role of art works in the enrichment of life.

**514 Philosophy of Religion (3)** Dominant trends in religious philosophy of the Western world. Religious language, reason, and faith, science, the nature of man, the existence of God, and mysticism.

**515 Existentialism (3)** Background and themes of current existentialism, as reflected in

Kierkegaard, Jaspers, Marcel, Heidegger, and Sartre. Evaluation of existentialism and its impact on contemporary literature, drama, art, and society.

**520 Philosophy of Mind (3)** The human mind, according to representative views. Presuppositions and implications, both scientific and philosophic, traced and analyzed. The mind-body problem, perception, memory, and the implications of depth psychology.

**522 Philosophy of Science (3)** The course

begins with case studies in science and derives general principles from them. Scientific law, analogy, models, variant theories, confirmation, and interpretation.

**523 Philosophy of Language (also LIN 523)** (3) Problems of language and oral communication, with emphasis on problems of reference.

**530 American Philosophy (3)** American views of man, society, and the universe, from colonial times to the 20th century.

◆**531 Oriental Philosophy (3)** Central figures and classic teachings of Eastern philosophy and

religion: Islam, Hinduism, Buddhism, Confucianism, Taoism, and Shintoism; naturalistic and humanistic elements of decisive influence on the culture of the Orient.

**536 Symbolic Logic (3)** Basic principles and methods of symbolic logic. Practice in determining validity of sentential and quantificational arguments. The algebra of classes.

◆**590 Independent Studies in Philosophy (3)**

◆**599 Philosophic Concepts and Systems (3)** Basic concepts of the philosophic enterprise: form, matter, the categories, cause, and purpose.

Relation of premises to method and conclusions. Rival theories are compared for justification and adequacy.

**610 Thesis (6)**

◆**640 Seminar (3)** Study and evaluation of the major works of one philosopher, such as Plato, Aquinas, Kant, or Wittgenstein.

**The following undergraduate course may also be taken for graduate credit, when properly approved: PHI 483, Philosophy of History.**

◆This course may be taken again for credit

## Physical Education

Health and Physical Education Center  
West Chester University  
West Chester, PA 19383  
(215) 436-2260

Prof. Trezise, *Chairperson*

Dr. Lank, *Graduate Coordinator*

### PROFESSORS

Monita M. Lank, Ph.D., *University of Iowa*

John M. Lowe, Ed.D., *University of Toledo*

### ASSOCIATE PROFESSORS

Mildred L. Greenwood, M.Ed., *Temple University*

Melvin M. Lorback, M.S., *Pennsylvania State University*

Carla Shinnars, Ed.D., *Brigham Young University*

John N. Trezise, M.Ed., *University of Pittsburgh*

Lloyd C. Wilkinson, M.A., *Villanova University*

Richard B. Yoder, M.A., *Villanova University*

### ASSISTANT PROFESSORS

Joseph J. Godek III, M.S., *West Chester University*

Karen M. Koehler, Ed.D., *University of North Carolina—Greensboro*

Monica P. Lepore, M.S., *University of Wisconsin*

Paul K. Smith, Ph.D., *Southern Illinois University*

M. Kent Todd, Ph.D., *University of North Carolina—Greensboro*

The Department of Physical Education offers programs leading to a Master of Science degree in physical education, and a Master of Science degree with a concentration in sport and athletic administration within the Master of Science in Administration. The Master of Science degree in physical education (research project track) enriches academic preparation for teaching in the public schools or obtaining employment in the various professions related to physical education. The Master of Science degree in physical education (thesis track) is designed primarily to meet the individual needs of graduate students who want to pursue graduate work beyond the master's degree or a career in research. It may also prepare personnel for staff positions in education, government, and industry.

The sport and athletic administration concentration in the Master of Science in Administration program is designed to provide academic preparation for those persons interested

in entering the field of sport and athletic administration, and to assist in upgrading the credentials of those persons presently in the fields of sport and athletic administration.

Certification programs in driver education and safe living, and coaching are also offered by the Department of Physical Education.

The Department of Physical Education also offers graduate assistantships.

### THE PROFESSOR RUSSELL STURZEBECKER SCHOLARSHIP

The Graduate Division in the School of Health Sciences in the Department of Physical Education administers the Professor Russell Sturzebecker Scholarship. Through the generosity of Mr. John F. Unruh, a \$100 award is made each semester to a "worthy and needy" graduate student in health and physical education. The award is donated by Mr. Unruh in honor of Professor Sturzebecker.

The recipient must be working full time in the field of health and physical education and must be a part-time student at West Chester University working towards a master's degree in his or her professional field.

Graduate students who meet the above criteria are invited to send a letter of application for the scholarship along with a resume of their professional and academic status. These documents should be submitted to the chairperson of the Department of Physical Education on or before December 15 for the first semester award and on or before March 15 for the second semester.

### THE GRADUATE SCHOLARSHIP

The Graduate Division of the Department of Physical Education administers a graduate scholarship. The amount of money awarded may vary somewhat from year to year depending on the funds available, but it is anticipated that the award will be approximately \$300 each year.

Selection criteria include scholarship, citizenship and character, leadership, need, and ability in, and/or contribution to, specific areas of health or physical education.

Application forms are available from the Office of the Department of Physical Education, Room 106, South Campus.

### COMMUNICATION WITH THE DEPARTMENT

All inquiries and other communications regarding the graduate program in physical education should be addressed to the coordinator of graduate studies and sent to the department address above.

### COMPREHENSIVE EXAMINATION

The comprehensive examination for graduate students in physical education is administered twice a year, in March and October.

Each examination consists of an elective course portion, given for two hours on a Tuesday, and the required course portion, given for two hours on the following Thursday.

Students who want to take the examination should have been admitted to degree candidacy and completed all required course work or be currently enrolled and have completed the majority of their elective requirements. A letter of intent to take the comprehensive examination should be filed with the coordinator of graduate studies. Letters of intent should be filed by February 15 for the March examination or September 15 for the October examination, respectively.

Upon receipt of the letter of intent and with the approval of the coordinator, students will be sent a letter explaining the details of time and place of the examination.

## MASTER OF SCIENCE PROGRAM

### Admission to the M.S. Program

Applicants must meet the basic requirements of the University, given under Admission, and must present either a baccalaureate degree earned in their anticipated major area of health or health and physical education, or equivalent preparation in a related field.

### Admission to M.S. Degree Candidacy

During the 15 semester hours of precandidacy, majors in physical education must complete any three of the departmental core courses with a minimum grade point average for these and all other courses of 3.0.

### Requirements for the M.S. Degree

1. Satisfactory completion of the M.S. curriculum shown below with an average of 3.0.
2. Satisfactory performance on written and/or oral comprehensive examination.
3. Successful completion of thesis or research report.
4. Oral defense of the thesis (for thesis track only).  
Workshop credits do not count toward the degree.

## CURRICULUM

### 1. Degree Core 21 semester hours

- PED 572 Advanced Motor Learning (3)
- PED 580 Psychological and Sociological Foundations of Physical Education and Sport (3)
- PED 585 Biomechanics (3)
- HPE 600 Research Methods in Health, Physical Education, and Recreation (3)
- PED 601 Statistical Design for Research and Evaluation in Physical Education (3)
- PED 602 Philosophical Foundations for Physical Education and Sport (3)
- PED 681 Advanced Exercise Physiology (3)

### 2. Additional Degree Requirements — Thesis Track

- PED 608 Thesis Seminar (3)
- PED 610 Thesis (3)
- Electives selected under advisement (6)

### Additional Degree Requirements —

#### Research Report Track 13 semester hours

- PED 606 Research Project Seminar I (2)
- PED 607 Research Project Seminar II (2)
- Electives selected under advisement (9)

The thesis proposal must be formally approved during Thesis Seminar (PED 608) before the student may register for Thesis (PED 610).

## CONCENTRATION IN SPORT AND ATHLETIC ADMINISTRATION — MASTER OF SCIENCE IN ADMINISTRATION

### Admission to the M.S. Program

Applicants must meet the basic requirements of the University, given under Admission, and must present either a baccalaureate degree in their anticipated major area of health and physical education or equivalent preparation in a related field. They must also present the results of the aptitude section of the Graduate Record Examination or the Miller Analogies Test.

### Admission to M.S. Degree Candidacy

During the 15 semester hours of precandidacy, majors in the sport and athletic concentration must complete three of the administrative core courses and two of the sport and athletic administration core courses with a minimum grade point average for these courses of 3.0.

### Requirements for the M.S. Degree

1. Satisfactory completion of the M.S. in administration curriculum shown below with an overall average of 3.0.
2. Satisfactory performance on the written and/or oral comprehensive examination.
3. Successful completion of research project.

## CURRICULUM

### 1. Administrative Core 18 semester hours

- ADM 501 Administrative Theory and Environment (3)
- ADM 502 Computers for Managers (3)
- ADM 503 Accounting for Administrators (3)
- ADM 504 Communication for Administrators (3)
- ADM 505 Organizing Human Resources (3)
- ADM 506 Budgeting and Fiscal Management (3)

### 2. Sport and Athletic Administrative Core 15 semester hours

- PED 580 Psychological and Sociological Foundations of Physical Education and Sport (3)
- HPE 600 Research Methods in Health, Physical Education, and Recreation (3)
- PED 601 Statistical Design for Research and Evaluation in Physical Education (3)
- PED 602 Philosophical Foundations of Physical Education (3)
- PED 604 Administration and Supervisory Practices for Health, Physical Education, Recreation, and Athletics (3) *or*
- PED 613 Athletic Management (3)

### 3. Additional Requirements 4 semester hours

- PED 606 Research Project Seminar I (2)
- PED 607 Research Project Seminar II (2)

The research project consists of a two-semester sequence (PED 606 and 607) which must be preceded by successful completion of HPE 606 (Research Methods in Health, Physical Education, and Recreation).

## CERTIFICATION PROGRAM IN DRIVER EDUCATION AND SAFE LIVING

(Highway Safety and General Safety Education)

John J. Furlow, *Coordinator*

A teacher's certificate may be extended to include education for safe living (highway safety and general safety education) by completing 12 semester hours of course work in the Department of Physical Education. Six of these hours must be met by History and Philosophy of Safety Education and Principles of Accident Prevention (PED 660) and Seminar in the Four-Phase Program of Driver Education (PED 561). The remaining two courses are chosen, under advisement by the coordinator, from PED 560, 661, and 662.

## COURSE DESCRIPTIONS

### PHYSICAL EDUCATION

Symbol: PED unless otherwise indicated

#### **500 Contemporary Problems in Physical Education, Recreation, and Athletics (3)**

Problems in teaching health, physical education, and recreation; in-service aspects; factors and variables that influence solutions of these problems

#### **550 Elementary Physical Education**

**Workshop (3)** Orientation for the teaching of elementary physical education. Principles and practices; appropriate activities for various grade levels.

#### **551 Elementary Physical Education**

**Recreation Music Workshop (2)** Leading and teaching rhythmic activities and singing in elementary physical education and recreation. Fundamental level. Instruction programmed music textbook; piano and guitar chords. Creating and teaching recreational and singing games.

#### **552 Learning on the Move (3)**

Movement education and perceptual motor theory. Activities for helping children achieve their maximum development.

#### **560 Seminar in Motorcycle Safety Education**

**(3)** Curricular design, administration, and operational techniques of motorcycle safety programs. Laboratory experiences.

#### **561 Seminar in the Four-Phase Program of**

**Driver Education (3)** In-service experience for driver education teachers in classroom. Behind the wheel (BTW), multicar method, and simulation.

#### **570 Leadership in Outdoor Adventure**

**Education (3)** Designed to provide instruction that would help persons interested in understanding and adapting "Outward Bound" philosophy, educational methodology, process, and activities for use in outdoor education and physical education programs.

**572 Advanced Motor Learning (3)** An investigation of the theories, research, and practical applications of the processes and conditions involved in the teaching and learning of physical skills.

**577 Summer Dance Workshop (1)** Experience in dance as a performing art. lighting, set design, and costume. Original compositions are staged. The workshop combines various dance techniques.

#### **580 Psychological and Sociological Foundations of Physical Education and Sport (3)**

Study of the cultural evolution of sport and physical education; the interrelationship between sport and culture; the social dynamics, institutionalization, and sociological elements of activity; a basis of sport psychology

#### **581 Adapted Physical Education (3)**

Techniques for a program of adapted physical education in the public school. Application of activities to benefit the child with a temporary or permanent disability.

#### **582 Modern Principles of Athletic Training**

**(3)** A course for the physical educator and/or coach. Injuries that occur in class, practice, and game situations; preventive taping and wrapping; immediate first-aid procedures; relations with the medical profession.

**585 Biomechanics (3)** A review of, or introduction to, the basic principles of biomechanics and the application of those principles to research and teaching.

#### **586 The Olympic Games — Their Influences on the Ancient and Contemporary Worlds**

**(3)** Ancient and modern games and their historical and cultural significance. Sociological and political implications of the modern games.

#### **HPE 600 Research Methods in Health, Physical Education, and Recreation (3)**

Techniques of research applied to the field of health, physical education, and recreation.

#### **601 Statistical Design for Research and**

**Evaluation in Physical Education (3)** The practical and theoretical application of the basic concepts of elementary statistics as they relate to evaluative procedures, research, and teaching in physical education.

#### **602 Philosophical Foundations for Physical**

**Education and Sport (3)** Analysis and synthesis of the nature, meaning, and value of health and physical education from a historical perspective. Development of a personal philosophy of the field.

#### **603 Professional Literature Seminar (3)**

Provides students with the skills necessary to review and critically analyze the professional literature and current findings in physical education, useful for the student planning to conduct research.

#### **604 Administration and Supervisory Practices for Health, Physical Education,**

**Recreation, and Athletics (3)** Nature of the positions of directors or supervisors of physical education, recreation, and athletics. Job specifications; operational principles and procedures

#### **605 Curriculum in Physical Education (3)**

Trends in health and physical education curricula at the elementary, secondary, and college levels. Surveys, reports, and analyses of curriculum practices

#### **606 Research Project Seminar I (2)**

A course for master's candidates who select the report option. Students select a problem for the research report, review literature, develop procedures, and collect data. They are expected to complete the first three chapters of their research reports during Seminar I and will continue to register for this course each semester and summer session until this requirement is met. Students then register for Seminar II

#### **607 Research Project Seminar II (2)**

Master's candidates register for this course after completing Seminar I. In this course, students complete chapters four and five of the research report. Students must continue to register for this course each semester and summer session until their reports are satisfactorily completed.

**608 Thesis Seminar (3)** A course for the student who selects the thesis option. The candidate selects a topic, reviews the literature, develops procedures, and prepares a proposal acceptable to the thesis committee. Candidates continue to register for this course until they have met the requirements. Then they register for PED 610.

#### **609 Independent Study and Special Projects**

**(1-3)** Students select independent study projects

and develop proposals. These projects may be in support of students' research or related to their vocations. The proposals must be accepted and approved by the coordinator of graduate studies in the semester prior to registration for independent study.

**610 Thesis (3)** Students register for this course after completion of PED 608. They write the five chapters of their theses during this course and must continue to register for this course until their theses are accepted by the committee.

**611-612 Intern Study (3) (3)** For the M.S.A. student in athletic administration who needs or desires practical experience in administering athletic programs. (The student may elect 3-6 credits of internship experience.)

**613 Athletic Management (3)** Provides an overview of the management responsibilities of the sport administrator, including planning staffing, directing, and controlling the sport enterprise. Emphasis will be placed on personnel, financial, facility management, and public relations.

#### **650 The Child and Physical Education (3)**

Contributions of physical education to a child's physical, social, emotional, and intellectual growth and to developmental needs and interests. The influences of various activities on growth and development.

#### **660 History and Philosophy of Safety Education and Principles of Accident**

**Prevention (3)** The safety movement in the United States and other countries. The place of safety education in modern living; philosophies of safety-education leaders; accident causation and prevention (their research implications). Background for administering school, civil defense, and emergency safety programs

#### **661 Contemporary Practices and Program**

**Evaluation in Safety Education (3)** Current practices, evaluation of programs, and research of current literature in safety education. Techniques for selecting, constructing, and using instruments for evaluating safety-education programs. Problem-solving projects.

#### **662 Problems in Traffic and Driver**

**Education (3)** Contemporary curriculum and current practices in driver and traffic education, enforcement of traffic laws and regulations, and engineering problems. Problem-solving projects.

#### **663 Psychology in Safety Education and**

**Accident Prevention (3)** Effects of unconscious determinism, habits, attitudes, individual adjustment, motivation, and personality on accident causation. Research implications explored

#### **680 Scientific Principles of Coaching (3)**

Recent trends in theories and techniques of teaching sports. Mechanical principles of efficient movement. Research related to competitive performance. Specialists serve as guest panelists.

#### **681 Advanced Exercise Physiology (3)**

Clinical and laboratory use of exercise in evaluating, maintaining, and modifying human physiological processes: growth development, metabolism and weight control, cardiovascular and respiratory functions in health and disease, and neuromuscular integration and performance. Stress physiology and training and conditioning



**682 Biodynamics of Human Performance**

(3) Physiology of the active, vital organism. Scientific findings concerning human performance, especially under stress, and accompanying physiological adjustments.

**683 Comparative Physical Education (3)**

Comparative study of programs outside the United States. Current philosophies, principles, and practices.

**684 Sport and Society (3)** Using a historical context, a model of the role of sport in a variety of societal environments will be constructed.

Emphasis will be placed on the view of sport as a form of human expression that reflects the current value structure of a particular society.

**685 Women's Exercise and Sports (3)** The physiological, psychological, and sociological effects of exercise and sport on women.

**686 Organization and Management of Adult**

**Fitness Programs: Clinic/Seminar (3)** An in-depth analysis and practical experience in organizing and managing adult fitness programs.

**690 Exercise and the Older Adult** A course

designed to prepare professionals to assess fitness levels of persons over the age of 50 and scientifically design exercise and fitness programs to meet the specific needs of the older participant.

**SERVICE COURSES**

The following courses are open to students in all curricula, with no prerequisite in health or physical education required:

PED 550, 551, 552, 560, 561, 570, 577, 580, 581, 585, 605, 650, 660, 661, 662, 663, 680, and 682.

## Physical Science

**(Interdepartmental)**

Dr. Pritchard (Geology and Astronomy) and Dr. Magnuson (Chemistry), *Program Coordinators*

An interdepartmental master's degree program is offered by the departments of Chemistry, and Geology and Astronomy. The program may be adopted to meet the needs of those who teach, plan to pursue graduate studies in other institutions, or prepare for careers in the physical sciences.

Leading to the Master of Arts degree, the program makes it possible for students to plan a sequence of studies meeting their individual needs. This may be accomplished either through selections from each of the disciplines or by concentrating in one of them.

**Entrance Requirements**

Students entering the program are normally expected to have a bachelor's degree in science or science education and, if teaching in the public schools, a valid teaching certificate.

**MASTER OF ARTS IN PHYSICAL SCIENCE**

Thirty-four semester hours and successful completion of a comprehensive examination. Those taking their courses in the Department of Geology and Astronomy will be expected to complete a six-hour thesis as part of the required 34 semester hours.

A program of 34 semester hours is developed, under advisement, from course selections in chemistry, physics, mathematics, geology, astronomy, and science education. Normally, course work is restricted to these areas. However, exceptions may be made under special circumstances. Consult with the appropriate department graduate coordinator.

Near the end of the program, the student must pass a comprehensive examination that will demonstrate subject matter knowledge, as well as an ability to observe, analyze, integrate, synthesize, and understand the broad physical concepts related to the course of study. Consult with the appropriate department.

For descriptions of course offerings, see the sections covering the departments of Chemistry, Geology and Astronomy, and Mathematics and Computer Science.

## Political Science

207 Ruby Jones Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2343

Dr. Weislogel, *Chairperson*

Mr. Burton, *Public Administration; Advisor*

Dr. Milne, *Director, M.S. in Administration; Coordinator of Graduate Studies*

**PROFESSORS**

Thomas J. Brady, J.D., *Temple University*

Robert J. Marbach, Ph.D., *Temple University*

James S. Milne, Ph.D., *Temple University*

John C. Shea, Ph.D., *University of Pittsburgh*

**ASSOCIATE PROFESSORS**

William F. Burns, M.A., *Case Western Reserve University*

A. Wayne Burton, M.A., *University of Pennsylvania*

David S. Eldredge, A.M.T., *Harvard University*

Lawrence V. Iacono, M.Ed., *West Chester University*

Bhim Sandhu, Ph.D., *University of Missouri*

James G. Smith, Ph.D., *Indiana University*

Louis F. Weislogel, Ed.D., *Nova University*

**ASSISTANT PROFESSOR**

Yury Polsky, Ph.D., *University of Michigan*

The Department of Political Science offers programs leading to the Master of Arts in political science, and the Master of Science in Administration with a concentration in public administration. The latter is an interdisciplinary degree described in the section on the Master of Science in Administration. The Master of Arts in political science is designed for persons active in education, government, politics, commerce, or industry, as well as for those who wish to enrich their cultural background. NOTE: Admissions to the M.A. program are suspended until further notice.

**MASTER OF SCIENCE IN ADMINISTRATION****Concentration in Public Administration**

(36 semester hours)

**Required: Administration Core**

ADM 501, 502, 503, 504, 505, 506, and 507

18 semester hours



**Option 1: Public Administration Core\***

18 semester hours

Focus on state and local government  
 ADM 500 Methods and Materials of Research (3)  
 PSC 544 American Public Policy (3)  
 PSC 549 Politics of Bureaucracy and Administrative Behavior (3)  
 ADM 600 Research Report (3)  
 GEO 525 Urban and Regional Planning (3)  
 GEO 527 Planning Law and Organization (3)

or

**Option 2: Individually Contracted Public Administration Core\***

18 semester hours

Specialized focus, taken under advisement, to meet the student's career goals and needs  
 ADM 500 Methods and Materials of Research (3)  
 PSC 544 American Public Policy (3)  
 PSC 549 Politics of Bureaucracy and Administrative Behavior (3)

ADM 600 Research Report (3)

Elective (3)

Elective (3)

The objective of option 2 is to allow students to select courses from University graduate programs to tailor a program suitable to their career goals or specialized needs.

Both concentration options allow for an internship experience (ADM 612 Internship) of 3-6 semester hours, depending on prior student preparation. Students with little or no organizational work experience may be required to successfully complete ADM 612 as an *additional* 3-6 hours in the concentration

**A comprehensive examination in the concentration is required.**

The examination will be based on core and concentration course work.

\*Students with undergraduate majors in political science may be permitted, under advisement, to substitute appropriate courses

**POLITICAL SCIENCE**

Symbol: PSC/PAD

**515 Women in Politics (3)** The role of women in politics is surveyed. Considerations include the relationship between the sexes as it has an impact on politics

**525 The American Presidency (3)** Analysis of the presidency, stressing its evolution into a modern institution and the contemporary, behavioral aspects of the office. Personality, power, and campaign strategy in conjunction with presidential relations with the executive branch, Congress, courts, and the media.

**531 Modern Political Theory (3)** Critical analysis of enduring political problems as seen primarily in the writings of theorists from Machiavelli to the present, basic concepts of political science; theories concerning the proper role of the state in society.

**532 International Relations (3)** Factors motivating the actions of nations; machinery evolved by nation states for effecting their various policies. Methods of diplomacy, international law, and international organization.

**533 Congressional Politics (3)** The politics of, and the legislative process in, Congress. Internal influences on the Congressional performance, such as rules, norms, and behavior, and external influences including the executive branch and interest groups

**534 American Political Parties (3)** Patterns, functions, and history of the American political party system at national, state, and local levels. Theoretical and empirical studies of political interest groups, public opinion, and voting behavior

**540 American Constitutional Law (3)** Evolution of constitutional law through study of the leading decisions of the Supreme Court and their significance for the American governmental system

**541 Latin American Culture and Politics (3)**

Comparative analysis of contemporary Latin-American systems. Stress of political culture, decision making, ideologies, and political processes.

**542 Dynamics of Public Opinion and Political Behavior (3)** The political role and style of masses and elites; uses and abuses of polls, political socialization, voting behavior, campaigning, and media. Understanding individual opinion formation (micro) and mass publics (macro).

**544 American Public Policy (3)** Survey of literature; examination of approaches; discussion of concepts and issues in the field of American politics and policy processes

**548 The Communist Powers (3)** Comparative study of various Communist systems, particularly the U.S.S.R. and China. Elite-mass relationships; role of Marxism-Leninism; party, economic, and political structures. Secondary attention to Eastern Europe, Cuba and nonruling parties

**549 Politics of Bureaucracy and Administrative Behavior (3)** In-depth examination of the fourth branch of government. Impact of administrative apparatus (bureaucracy) on public policy formulation and implementation in the United States

**551 The Politics of Non-Western Areas (3)** Problems of nation building, political participation, and elite-mass relationships in the less developed nations. Latin American, Asian, or African nations may be stressed as a case study

**552 Civil Liberties and Civil Rights (3)** Analysis of constitutional rights and governmental attitudes with respect to civil liberties. Emphasis on case-study method and role playing.

**560 The Politics of Revolution (3)** Synthesis of research, concepts, and theories of revolution. Stress on the meaning, causes, phases, and ideologies of revolution. Contemporary movements emphasized

**PAD 561 State and Local Government (3)**

Examination of the organization, functions, and politics of state and local government, including analysis of politics in states, counties, cities, and towns in urban, suburban, and rural areas. Inter-governmental relations in education, transportation, and welfare policy are examined.

**PAD 563 Urban Government (3)** Structures and processes of central city and suburban government are considered. Examines patterns and trends in government organization and administration, as well as related sources of conflict in urban decision making, e.g., the urbanization process, race and class antagonism, and city-suburban prospectives.

**PAD 573 American Intergovernmental Relations (3)** Designed to familiarize students with the complex network of conflict, cooperation, and interdependence among national, state, and local government units. Topic areas include an analysis of continuing evolution of American federalism, an examination of this relationship from state and city government perspectives, and a description of specific intergovernmental fiscal programs and policies.

**590 Independent Studies in Political Science (1-3)** Research projects, reports, and readings in political science. PREREQ: Approval of department chairperson

**ADMINISTRATION**

Symbol:ADM

**500 Methods and Materials of Research (3)** Logic of scientific methodology and research design construction. Stress on hypothesis development and testing, data collection, measurement problems, and theory application

**600 Research Report (3)**

**610 Thesis (3)**

**612 Internship (3-6)** Intensive field placement in organization under faculty guidance and supervision. Precontracted learning objectives

## Psychology

206 Anderson Hall  
West Chester University  
West Chester, PA 19383  
(215) 436-2945

Dr. Pollak, *Chairperson*  
Dr. Duncan, *Assistant Chairperson*  
Dr. Kumar, *Coordinator of Graduate Studies*

### PROFESSORS

Jay L. Clark, Ph.D., *University of Minnesota*  
Mary E. Crawford, Ph.D., *University of Delaware*  
Phillip Duncan, Ph.D., *University of Florida*  
V. Krishna Kumar, Ph.D., *University of Wisconsin-Madison*  
Robert S. Means, Ph.D., *University of Alabama*  
Samuel F. Moore, Ph.D., *University of Cincinnati*  
Walena C. Morse, Ph.D., *Bryn Mawr College*  
Edward I. Pollak, Ph.D., *University of Connecticut*  
Jack Porter, Ed.D., *Temple University*  
Louis H. Porter, Ph.D., *Howard University*  
Harold R. Sands, Ph.D., *Pennsylvania State University*  
Edward D. Smith, Ed.D., *Pennsylvania State University*

### ASSOCIATE PROFESSORS

Robert R. Shinehouse, M.A., *Temple University*  
Thomas Treadwell, Ed.D., *Temple University*

### ASSISTANT PROFESSORS

Arvid Bloom, Ph.D., *Colorado State University*  
Darlene DeSantis, Ph.D., *University of Connecticut*  
Deborah Mahlstedt, Ph.D., *Temple University*

Two degree programs are offered by the Department of Psychology. One leads to the Master of Arts in psychology; the second to the Master of Science in Administration with a concentration in psychology. Within the M.A. in psychology, concentrations are offered in clinical psychology, industrial/organizational psychology, general psychology, and group psychotherapy processes.

#### Admission Standards

The minimum admission standards for the Department of Psychology are an undergraduate GPA of 3.0; a psychology GPA for three or more courses of 3.25; GRE or MAT scores in the 40th percentile or above; advanced psychology portions of the GRE (undergraduate psychology majors only), and three letters of reference. An interview with the Department Admissions Committee may also be required. Typically, admissions are made on a once-a-year basis with April 15 serving as the application deadline. Students accepted into a concentration may, with the approval of the Graduate Committee, transfer to another concentration. A few applicants who do not fully meet the outlined admission requirements may be admitted on a provisional basis depending on their maturity, relevant work experiences, and academic promise.

#### Degree Programs

##### MASTER OF ARTS IN PSYCHOLOGY

Several degree options are offered. The Master of Arts degree is offered with a concentration in **clinical psychology** for students

who wish to work in a mental health setting or to continue their education at the doctoral level. A concentration in **general psychology** is offered for students interested in research, teaching, or in continuing their graduate studies. The concentration in **group psychotherapy/processes** prepares students for professional service in community mental health/hospital, education, and organizational systems. Specialized training is provided in group psychotherapy, psychodrama, and sociometry. This program fulfills the eligibility requirements for certification as a psychodramatist, specified by The American Board of Examiners in Psychodrama, Sociometry, and Group Psychotherapy. The Department of Psychology has been preliminarily approved by the American Society of Group Psychotherapy, Psychodrama, and Sociometry as an accredited training program and center in psychodrama. The concentration in **industrial/organizational psychology** is designed for students interested in employment in business or industry or for those who wish to continue their education at the doctoral level in a related area.

In addition, the Psychology Department has a cooperative agreement with the school psychology and educational psychology programs at Pennsylvania State University. Students in the West Chester University psychology master's degree programs who qualify are given early admission consideration to these programs, and receive credit toward the Ed.D. or the Ph.D. for course work completed at West Chester University. For details, see the department's graduate handbook.

Students may have to take one or more courses during the summer to complete their program. All students who expect to obtain an M.A. in psychology are required to pass a comprehensive examination. However, the comprehensive examination will be waived for those students who elect to write a thesis.

More details about the program are available in the department's graduate handbook.

##### MASTER OF SCIENCE IN ADMINISTRATION

###### Concentration: Psychology

The Department of Psychology participates in an interdisciplinary degree program leading to a Master of Science in Administration with a concentration in psychology. Two options are offered in the psychology concentration. The first option emphasizes personnel administration. The second allows the student to design an individualized psychology concentration. (See the section describing Administration.)

##### MASTER OF ARTS IN PSYCHOLOGY

###### Concentration: Clinical Psychology

(40-42 semester hours)

The clinical concentration involves taking 30 semester hours of required course work: PSY 502, 506, 512, 517, 524, 527, 544, 549, 559, and 595. Students are also required to take six semester hours of electives selected from PSY 464, 509, 513, 530, 543, 550, 562, 565, 600, and 610. In addition, a 4-6 semester hour Clinical Practicum (PSY 615) is required. Students should make every effort to take the following core courses first: PSY 502, 506, 512, 517, and 524.

###### Concentration: General Psychology

(33-36 semester hours)

The following 15 semester hours of course work are required: PSY 502, 506, 512, 517, and 524. All students in this concentration are required to complete a research report (PSY 600) and write a thesis (PSY 610). All students must also complete 15 semester

hours of electives. Subject to approval, six of the elective credits may be taken from the graduate offerings of other departments. The departmental courses allowed as electives are PSY 445, 464, 475, 509, 527, 530, 550, 562, and 565. (Note: No more than six semester hours of 400-level courses are allowed as electives.)

### **Concentration: Group Psychotherapy/Processes**

(45-51 semester hours)

The group psychotherapy processes concentration involves 33 semester hours of required course work (EDC 567, PSY 543, 547, 502, 512, 513, 514, 517, 550, 559, and 595). The student must also complete two of the following courses: PSY 527, 544, 549, or 562. In addition, a three-semester-hour Clinical Practicum (PSY 615), for which the preceding courses serve as prerequisites, is required. Another requirement is completion of either a thesis (PSY 610) or research report (PSY 600).

## **COURSE DESCRIPTIONS\***

### **PSYCHOLOGY**

Symbol: PSY

**501 Introductory Statistics for the Behavioral Sciences (3)** Central tendency, variability, standard scores, correlation, probability, sampling, tests of hypotheses, "t" test, chi square, distribution-free statistics, and introduction to analysis of variance. PSY 501 is particularly recommended for those who are weak in, or have not previously been exposed to, behavioral sciences statistics.

**502 Advanced Statistics for Behavioral Sciences (3)** This course covers inferential statistical techniques with emphasis on application to research in psychology and related areas. PREREQ: PSY 501 or equivalent.

**506 Theories of Learning (3)** Survey and critical review of existing theories of learning and the relevant research data.

**509 Advanced Social Psychology (3)** Emphasizes contemporary approaches to the study of social behavior including cognitive, social, and experimental and quasi-experimental research methodology.

**512 Psychology of Personality (3)** The interaction and effects of forces that influence personality development. Normal and neurotic development are contrasted. Principles of personality measurement are explored.

**513 Theory and Practice of Psychodrama (3)** This course introduces theory and practice of psychodrama as a psychotherapeutic modality, emphasizing psychodramatic and sociometric techniques. It gives each person a chance to participate in using sociometry and psychodrama techniques and integrates the theoretical with the applied components of psychodrama.

**514 Theory and Practice of Psychodrama II (3)** Continuation of PSY 513 at an advanced level with emphasis on clinical sociometry, the social atom concept, auxiliary ego techniques,

and directing. Instruction will include both didactic and experiential modes.

**517 Psychopathology (3)** Advanced study of abnormal human behavior and a description of pertinent types, including symptoms, causes, and treatment. Current and recent theoretical approaches and research findings relevant to the etiology and treatment of these disorders. PREREQ: An undergraduate course in abnormal psychology and PSY 512, or equivalents, or permission of instructor.

**524 Psychometrics (3)** A survey of measurement theory in psychology with emphasis on the logic of measurement, scaling models, statistical methods, and construction of valid and reliable measures. PREREQ: PSY 501. PSY 512 is recommended.

**526 Program Evaluation (3)** A survey of procedures for planning and evaluating programs in psychology, education, government services, health and welfare, etc. Topics include needs analysis, statement of objectives, definition and verification of treatment, operational measures, evaluation design, analysis-interpretation of data, and report writing. Case studies of evaluation from a variety of disciplines will be reviewed.

**527 Behavior Modification (3)** Application of learning principles and environmental control to behavior change. Foundation principles, techniques, and assessment methods of modification. PREREQ: PSY 506 or equivalent.

**530 Human Sexual Behavior (3)** The study of those variables under which human sexual behavior functions. Research from sociological and medical studies is integrated with psychological knowledge.

**543 Psychology of Group Processes (3)** Survey of psychological group processes, tracing the origins and historical development of the major theoretical orientations.

**544 Individual Psychometric Techniques: Wechsler and Binet Scales (3)** Historical development, administration, scoring, and interpretation of the Wechsler and Binet scales. PREREQ: PSY 501 and PSY 524 or equivalent. By permission only (usually restricted to clinical psychology majors).

**547 Human Intimacy (3)** A study of processes and factors in establishing, maintaining, and terminating relationships via the use of group methods.

### **Concentration: Industrial/Organizational Psychology**

(36-39 semester hours)

The industrial/organizational concentration includes 21 semester hours of required course work (PSY 502, 506, 524, 560, 562, 563, and 566). A three-credit internship (PSY 630) and a 3-6 credit research experience (PSY 600 and or PSY 610) are also required. In addition, students must take 3-5 elective courses which, in combination with their internship and research experience, will enable them to explore a particular aspect of the field in greater depth. The elective courses may be taken outside of the Psychology Department. Courses restricted to clinical psychology majors cannot be taken as electives. With careful selection of electives, internship, and research focus, students will be able to develop specialization in performance analysis and training, personnel evaluation and placement, or aspects of group and organizational processes in industrial/organizational psychology.

**549 Projective Techniques and Personality Testing (3)** History and theory of personality testing. Introduction to administration, scoring, and interpretation of projective techniques. PREREQ: PSY 517 or equivalent, and PSY 524. Clinical psychology majors, or others with permission of instructor.

**550 Seminar in Psychology (1-3)** Selected problems in psychology. Subject announced in advance of each semester. Offered on demand.

**559 Psychotherapy (3)** Theoretical considerations, principles, techniques, and problems involved in counseling and psychotherapy. Usually restricted to clinical psychology majors. PREREQ: PSY 512 and 517 or equivalents.

**560 Industrial Psychology (3)** Application of individual differences, learning, and aptitudes to functions such as personnel selection, placement, training, and evaluation.

**562 Organizational Psychology (3)** Focus on the relation between the individual and the organization. Elements of the organization that affect behavior are considered. Research designs appropriate to individual cases are presented.

**563 Performance Analysis (3)** An accomplishment-based approach to the analysis of human performance. Topics include measurement and analysis of performance opportunities and strategies for improving performance.

**564 Human Factors (3)** Methods and results of experimental psychology pertinent to man-machine relationship problems. Workplace design, systems approach, control and display, and man-in-space challenges are considered.

**565 Psychology of Women (3)** A study of behaviors and experiences of women, biological, cultural, interpersonal, and intrapersonal determinants of women's actions, thoughts, and feelings are explored.

**566 Seminar in Industrial/Organizational Psychology (3)** Recent technical, legal, social, and ethical aspects of the field are covered. Affirmative action and assessment, equal opportunity, minorities and women in the work force, and other pertinent issues are emphasized.

**567 Training and Psychology (3)** An overview of the training process in organizations. Topics range from needs analysis to evaluation of training programs.

\*All courses in the Psychology Department are restricted to those students who have been admitted to a degree program by the Psychology Department, or to those who have received special permission to register for a course from the Psychology Department graduate coordinator.

**590 Independent Studies in Psychology (1-3)**

Research projects, reports, and readings in psychology. PREREQ: Approval of department graduate coordinator.

**595 Clinical Psychology (3)** Survey of clinical techniques used in assessment and treatment of personality disorders. Restricted to psychology majors. PREREQ: PSY 512 and 517.

**600 Research Report (3)** An original review of the literature.\*\*

**610 Thesis (3-6)** An original empirical study. PREREQ: PSY 502 and permission of instructor.\*\*

**615 Clinical Practicum in Psychology (2-6)** Supervised professional participation in applied psychological activities, or projects in cooperating agencies and institutions. PREREQ: PSY 502, 506, 512, 517, 524, 544, 559, and 595. Restricted to clinical psychology majors and recommendation of graduate clinical faculty.\*\*

**620 Practicum in School Psychology (3-15)** Supervised experience as a school psychologist. Offered for students seeking out-of-state

certification as a school psychologist. (West Chester University does not presently offer a program leading to certification as a school psychologist in the Commonwealth of Pennsylvania.) Restricted to psychology majors.

**630 Internship in Industrial/Organizational Psychology (3)** Supervised professional participation in applied psychological activities within a business or organizational setting. PREREQ: Permission of instructor

**The following 400-level courses are frequently taken for graduate credit.**

**445 Organization and Development (3)** Major theoretical, research, and applied issues in organizational diagnosis and change. Class sessions are experimentally oriented.

**These additional 400-level courses may be taken for elective graduate credit with the permission of the course instructor and the student's program advisor, and/or the Psychology Department graduate coordinator:** PSY 435 (Animal Behavior), 450 (Motivation),

461 (Applied Psychology), 462 (History and Systems of Psychology), 464 (Physiological Psychology), 470 (Sensory and Perceptual Processes), 475 (Cognitive Psychology), 482 (Developmental Psychology II — Infancy and Childhood), 483 (Developmental Psychology III — Adolescence), 484 (Developmental Psychology IV — Adulthood and Aging), and 490 (Topical Seminar in Psychology).

Descriptions of these courses can be found in the current West Chester University Undergraduate Catalog.

**Requirements in addition to those existing for undergraduates are imposed for any 400-level course taken for graduate credit.**

\*\* While work on these courses may be completed any semester, students are encouraged to enroll for them during the summer sessions. Courses may be cancelled or the semester changed as required by enrollment. Summer courses depend upon adequate enrollment.

## Reading—See Childhood Studies and Reading

## Secondary Education—See Counselor, Secondary, and Professional Education

## Social Work

206 McCoy Center  
West Chester University  
West Chester, PA 19383  
(215) 436-2527

Ms. Joyner, *Chairperson*

Ms. Hodgins, *Graduate Coordinator*

### ASSOCIATE PROFESSORS

Charlotte E. Bartlett, M.S.S., *Bryn Mawr College*  
Sally A. Ross, M.S.W., *University of Pennsylvania*

### ASSISTANT PROFESSORS

Cheryl Hodgins, M.S.W., *University of Texas*  
Mildred Joyner, M.S.W., *Howard University*  
Robert B. McCutcheon, M.S.W., *Rutgers School of Social Work*

Susanne Wieder, M.S.W., *Smith College*

The department offers graduate courses in social work on a limited basis to graduate students from other areas as well as to advanced undergraduate majors and nonmajors.

### MASTER OF SCIENCE IN ADMINISTRATION

#### Concentration: Social Work

The Department of Social Work participates in an interdisciplinary degree program leading to a Master of Science in Administration with a concentration in social work. See Administration, page 23.

### Admission Requirements

Students applying for admission must have a B.S.W. or a B.A. in social work, or a B.A. or a B.S. and related work experience. Any student lacking a degree in social work or related field and work experience must seek approval of the graduate coordinator for entrance into the program. These students may be required to take extra courses and do extra projects.

### CURRICULUM

- 1. Administration Core** 18 semester hours
  - ADM 501 Administration Theory and Environment (3)
  - ADM 502 Computers for Managers (3)
  - ADM 503 Accounting for Administrators (3)
  - ADM 504 Communication for Administrators (3)
  - ADM 505 Organizing Human Resources (3)
  - ADM 506 Budgeting and Fiscal Management (3) or
  - ADM 507 Liability for Managers
- 2. Social Work Core** 18 semester hours
  - SWO 520 Theory for Social Work Practice (3)
  - (or elective if B.S.W.)
  - SWO 523 Supervision and Staff Development (3)
  - SWO 531 Program Development (3)
  - SWO 532 Social Legislation (3)
  - SWO 550 Internship (3)
  - SWO 552 Social Work Seminar (3)

NOTE: A substitute elective for an above course may be taken with permission of the coordinator. Comprehensive exams in social work will be required. Students with less than two years of social work experience will need to do an additional placement assignment in conjunction with SWO 520, Theory for Social Work Practice.

**COURSE DESCRIPTIONS****SOCIAL WORK**

Symbol: SWO

**520 Theory for Social Work Practice (3)** A survey of various psychological sociological theories with emphasis on their application to social work practice.

**523 Supervision and Staff Development (3)** Basic concepts of supervision as a medium for

instruction and staff development with an emphasis on the skill of supervision

**531 Program Development (3)** A study of current funding streams and the techniques of proposal development

**532 Social Legislation (3)** Analysis of social welfare policy with an emphasis on social change.

**550 Internship (3)** The application and

integration of theoretical concepts and the development of professional skills in a social agency in administrative practice, which are approved by the field coordinator.

**552 Social Work Seminar (3)** Students will meet in a weekly two and a half-hour practicum for the integration of theory and practice experience.

**NOTE: Individualized programs are designed to meet the student's needs.**

**Sociology— See Anthropology and Sociology****Special Education**

309 Recitation Hall

West Chester University

West Chester, PA 19383

(215) 436-2579

Ms. Nickles, *Chairperson*Ms. Nickles and Dr. Zlotowski, *Graduate Coordinators***PROFESSOR**Howard Freeman, Ed.D., *University of Pennsylvania***ASSOCIATE PROFESSOR**Martin Zlotowski, Ph.D., *Michigan State University***ASSISTANT PROFESSORS**Judith S. Finkel, Ph.D., *The Union Institute*Mary LaCoste, Ed.D., *University of New Orleans*Deborah A. Nickles, M.S., *Syracuse University*

The Special Education Department offers programs leading to the Master of Education in special education and certification in special education. These programs are open to teachers and other professionals interested in this field.

**THE MASTER OF EDUCATION PROGRAM ALONE DOES NOT LEAD TO LEVEL I CERTIFICATION IN SPECIAL EDUCATION.****MASTER OF EDUCATION IN SPECIAL EDUCATION**

All candidates must meet the general requirements for admission to a degree program at West Chester University, listed under Admission.

The following items should be returned with the completed application form to the Office of Graduate Studies and Sponsored Research:

1. A copy of the applicant's Pennsylvania Instructional I Certificate
2. An extended statement describing the applicant's interests, needs and goals, including the applicant's interest in taking graduate study
3. Evidence of an acceptable score on the Miller Analogies Test. Applicants must arrange for interviews with two members of the Special Education Department. Arrangements are made through the department secretary.

Failure to complete any of these application requirements will result in provisional matriculation status and will limit the number of courses the student may take.

**Degree Requirements**

1. The student must apply to be admitted to candidacy after the completion of 12 credit hours of work at West Chester University, including EDF 510 and two courses from the Special

Education Program. Grade point averages must be consistent with standards required in graduate studies at West Chester.

2. The student must pass a comprehensive examination after the completion of a minimum of 24 semester hours of work or a maximum of 30 semester hours. The student must file a written request with both the chairperson and the graduate coordinator to take the examination. The request should be filed no later than two weeks prior to the date of the examination. The examination may be taken twice, but a semester interval is required between failure and re-examination. A student who fails the examination twice must obtain approval of the department to take it a third and final time.
3. The student must complete all degree requirements with a cumulative average of 3.0 in areas II and III, with an overall GPA of 2.75.

**MASTER OF EDUCATION IN SPECIAL EDUCATION****Program Description**

The program is offered on a thesis or nonthesis basis:

Option A: (30 semester hours plus thesis)

The student will complete nine hours in Area I, 12 hours in Area II, nine hours in Area III, and EDA 591.

Option B: (36 semester hours)

The student will complete nine hours in Area I, 15 hours in Area II, and 12 hours in Area III

**Area I—Professional Education**

EDF 500 Methods and Materials of Research in Education (3)

EDF 510 Educational Foundations (3)

EDP 550 Advanced Educational Psychology (3)

**Area II—Special Education**

EDA 541 Psychology of Exceptional Children (3)

EDA 573 Developmental Assessment of Children with Learning Disabilities (3)

EDA 501 Prescriptive Teaching (3)

EDA 580 Current Issues and Trends (3)

EDA 581 Practicum—Special Education (3) (required in Option B)

EDA 591 Thesis and Research (6) (required in Option A)

**Area III—Concentration**

Students will select an area of concentration under advisement. The concentration will consist of approved courses from one of the following areas.

The Arts

Communication Disorders

Counseling

Instructional Media

Physical Education

Psychology

Criminal Justice

Educational Research

Elementary Education

Areas

Health Education

Reading

Secondary Education

Special Education

Urban Education

Student Designed Concentration

**COURSE DESCRIPTIONS****SPECIAL EDUCATION**

Symbol: EDA

*The following courses may be taken as electives by anyone in a graduate program, subject to approval from the department and the student's chairperson.*

**500 Mainstreaming for Exceptional**

**Students (3)** Designed to acquaint classroom teachers with special education students who may be spending some portion of the day in a regular setting. Current regulations and ways of meeting educational needs will be reviewed.

**501 Prescriptive Teaching (3)** An attempt to guide the teacher to an awareness of the methods by which medical, psychological, behavioral, and academic diagnosis may be converted into relevant educational terms, providing for adequate follow through on specific recommendations. PREREQ: EDA 573.

**502 Nature and Needs of the Gifted and**

**Talented (3)** Definition, identification, and enumeration of the characteristics of the gifted child, with emphasis on the need to provide effective and innovative means of meeting educational needs. Special attention devoted to understanding the nature and problems of the gifted underachiever.

**540 Workshop in Special Education (4)** An intensive program of observation and instruction of mentally retarded or physically handicapped children. Instructional experience with handicapped children is combined with lecture, demonstration, films, guest speakers, and case study. Primarily for in-service teachers

PREREQ: Permission of coordinator.

**541 Psychology of Exceptional Children (3)** Psychology of children whose intellectual, physical, social, and/or emotional characteristics are significantly deviant from those of children whose needs are met through normal educational routes.

**542 Developmental Disabilities (3)** Focus on the concept of developmental disabilities including etiology, manifestations, and identification. Genetic, psychosocial, and environmental factors are considered.

**544 Classroom Management (3)** Exploration of current practices in the management and modification of behavior. The professional's role in achieving a better basis for meaningful communication with the special child. Problems that may interfere with teacher effectiveness are discussed.

**560 Administration and Supervision of Special Education I (3)** An introduction to special education training. Concepts and practices presented will be those unique to the field of special education.

**561 Administration and Supervision of Special Education II (3)** This course is intended to develop an understanding of the principles and practices used in supervision, emphasizing individual and group processes.

**562 Supervision Practicum: Special Education (3)** This course is designed to provide practice for those skills gained through course work that are necessary for successful performance. This practicum will be conducted in an educational facility and assessed by

administrative and supervisory personnel.

**571 Childhood Learning Disabilities (3)** The study and education of the child with perceptual problems and/or minimal brain damage.

**572 The Emotionally Disturbed Child (3)** A study of abnormal and atypical behaviors exhibited by disturbed children, with emphasis on environmental contingencies and implications. Intervention and prevention strategies will be discussed.

**573 Developmental Assessment of Children with Learning Disabilities (3)** Diagnostic procedures and subsequent educational prescriptions useful with children experiencing learning difficulties. PREREQ: EDA 541 or equivalent.

**580 Current Issues and Trends (3)** Current trends, problems, and issues in special education, teacher education, research, and administration will be explored. Emerging concepts relating to special education and exceptional children will be emphasized.

**581 Practicum: Special Education (3)** Intended to provide the student an opportunity to put skills gained through course work into practice under supervision from the department. Weekly seminar required.

**590 Independent Study (1-3)**

**591 Thesis and Research (6)** This course will provide the student the opportunity to learn how to evaluate and interpret published research, to conduct a critical research review, and to develop and produce an original research paper. Offered on a two-semester basis with each part carrying three credits. PREREQ: EDF 500.

## Speech Communication and Theatre

512 Main Hall

West Chester University

West Chester, PA 19383

(215) 436-2500

Dr. Klinzing, *Chairperson***PROFESSORS**Diane O. Casagrande, Ph.D., *Temple University*Carolyn Keefe, Ed.D., *University of Pennsylvania*Dennis R. Klinzing, Ph.D., *Pennsylvania State University*William M. Morehouse, Ph.D., *Purdue University***ASSOCIATE PROFESSORS**Jay H. Berkowitz, M.A., *Temple University*Robert Bytnar, M.F.A., *University of Pittsburgh*Sara Newell, Ph.D., *University of Utah*C. Jack Orr, Ph.D., *Temple University***ASSISTANT PROFESSORS**Saundra M. Hall, M.A., *Ohio State University*William Jacobson, M.F.A., *Brandeis University*Amy Martz, Ph.D., *Pennsylvania State University*Michael Pearson, Ph.D., *Temple University***COURSE DESCRIPTIONS****SPEECH COMMUNICATION**

Symbol: SPC

**503 Communication and Persuasive**

**Influence (3)** An analysis of major conceptual approaches to persuasion and their implications for understanding influence contexts and designing pragmatic strategies

**506 Communication in Small Groups (3)** An examination of traditional and contemporary research pertaining to various dimensions of small group communication, including, but not limited to, the following topics: structure, size, tasks, goals, roles, systems, and leadership.

◆ **508 Special Topic Seminar (3)** An intensive

examination of a selected area in communication study. Topics will vary and will be announced in advance of each semester.

**515 Language, Thought, and Behavior (also LIN 515) (3)** Introduction to the relativistic language concepts of Korzybski and his followers. The course focuses on what language does to people and the subsequent effects on communication.

**517 Producing the Television Program (Nondramatic) (3)** Basic concepts of television planning and production for the nondramatic format. The student uses the tools of television (lecture and laboratory).

**518 Television Program Directing (Dra-**

**matic) (3)** Continuation and development of skills and knowledge in the use of television equipment; application of the arts of the theatre and film (lecture and laboratory). PREREQ: SPC 517.

**550 Listening: Verbal and Nonverbal Perceptions (3)** A survey of research in listening behavior and related nonverbal variables. Identification of important characteristics of effective listeners. Application to communication activities in the classroom.

◆ **599 Directed Graduate Studies (3)** Research projects, reports, and readings in speech communication. PREREQ: Approval of department chairperson.

◆ This course may be taken again for credit



**COURSE DESCRIPTIONS****THEATRE**

Symbol: THA

**506 Theatre Theory and Production (3)** A survey of theatre history and practice. Students

select specific areas of production and style for classroom presentation, analysis, and research

**516 Theory and Application of Creative Dramatics (3)** The use of creative dramatics as a teaching method. Research and application of theories and techniques.

**550 Summer Drama Workshop (1-6)** An intensive combination of instruction and applied production experiences. Graduate students will research production theories and submit scholarly papers at the end of the session. Summer only.

## Teaching English as a Second Language

550 Main Hall

West Chester University

West Chester, PA 19383

(215) 436-2898

Dr. Godfrey, *Program Coordinator*Diane O. Casagrande, Professor (*Speech*)W. Stephen Croddy, Professor (*Philosophy*)Dennis L. Godfrey, Assistant Professor (*English*)John T. Kelly, Associate Professor (*English*)Garrett Molholt, Assistant Professor (*English*)Cheri L. Micheau, Assistant Professor (*TESL and Linguistics*)Philip D. Smith, Jr., Professor (*TESL and Linguistics*)Paul A. Stoller, Associate Professor (*Anthropology*)

The Master of Arts in Teaching English as a Second Language is an interdisciplinary program contributed to by the departments of Anthropology and Sociology, English, Foreign Languages, Philosophy, and Speech Communication and Theatre. The program is designed for those preparing to teach English to students whose first language is not English. Students wishing to enter the program must consult the coordinator.

**ADMISSION TO THE PROGRAM**

In addition to meeting the general requirements for a master's degree at West Chester, the candidate must (1) present an acceptable baccalaureate degree, which includes at least 24 semester hours in the area of English/foreign languages/linguistics, at least six semester hours in the area of anthropology/psychol-

ogy/sociology, and a course in teaching reading (which may be taken as a program elective if it is lacking); (2) take the verbal and quantitative tests of the Graduate Record Examination or the Miller Analogies Test if deemed necessary; (3) demonstrate adequate proficiency in a foreign language if the student is a native speaker of English, or adequate proficiency in English if the student is a non-native speaker of English; and (4) fulfill the course requirements and pass a written and/or oral comprehensive examination, offered on the second Wednesday of October and March.

**M.A. IN TEACHING ENGLISH AS A SECOND LANGUAGE (TESL)**  
(33 semester hours)

**Required Courses**

24 semester hours

LIN 501, 503; LAN 500, 502, 503; ENG 575, 576, 577

Students submitting equivalent courses for any of the above may substitute, under advisement, courses from the groups below.

**Electives**

9 semester hours

Selected from the groups below. At least one course must be selected from Group I.

Group 1: ENG 579; LIN 540, 555, and 580

Group 2: ENG 578, and 590; LAN 504, 505, 580, 590, 600, and 610; LIN 504, 505, 512, and 590; PHI 506, and 523; SPC 515

With the approval of the coordinator, students wishing to acquire certification in English while enrolled in this program may use up to six hours of electives for this purpose. Students who have completed a minimum of 24 semester hours in approved courses are eligible for a certificate in TESL.

For descriptions of courses under this program TESL, see English (ENG), Foreign Languages (LAN), Linguistics (LIN), Philosophy (PHI), and Speech Communication and Theatre (SPC).

## Theatre — See Speech Communication and Theatre

## Women's Studies

211 Main Hall

West Chester University

West Chester, PA 19383

(215) 436-2464

Dr. Schlau, *Coordinator*Diane Casagrande, Professor (*Speech Communication and Theatre*)Mary E. Crawford, Professor (*Psychology*)Mary Ann Burns-Duffy, Assistant Professor (*Library Services*)Anne Dzamba, Professor (*History*)Robin Garrett, Assistant Professor (*Nursing*); Director, Women's CenterPatricia Johnson, Professor (*History*)Mary A. Keetz, Professor (*Childhood Studies and Reading*)Elizabeth Larsen, Assistant Professor (*English*)Mary McCullough, Assistant Professor (*Speech Communication and Theatre*)Lynette F. McGrath, Professor (*English*)Deborah Mahlstedt, Assistant Professor (*Psychology*)Tahany Naggat, Professor (*Economics*)Carol Radich, Professor (*Childhood Studies and Reading*)Geetha Ramanathan, Assistant Professor (*English*)Arlene Rengert, Professor (*Geography and Planning*)Stacey Schlau, Associate Professor (*Foreign Languages*)James Trotman, Professor (*English*)Richard J. Webster, Professor (*History*); Coordinator, American Studies



The Women's Studies Program consists of an interrelated group of courses offered in both arts and sciences and professional studies. Graduate courses include:

EDE 589 Humanizing Teaching and Learning  
ECO 503 Economic Role of Women  
PSC 515 Women and Politics  
SWO 521 Social Group Work with Women in Transition  
FRE 409 Women and Men in French Literature  
PSY 465 Psychology of Women  
PED 685 Women in Sport  
ADM 530 Women in Leadership

ADM 531 Management of Leadership

ENG 523 Shakespeare's Sisters

Graduate students may also pursue a Master of Science in Administration degree with a concentration in "Leadership for Women." This concentration involves six courses in administrative skill areas and six additional courses that enable the student to develop a mode of leadership appropriate to workplaces in which access to organizational power is inequitable for sexes of equal training and talent. See the sections "Leadership for Women" and "Master of Science in Administration" for further information.

# Guide to Course Prefixes

Because many program descriptions refer to courses offered by other departments, the following guide to course prefixes is provided.

ACC	Accounting	EDX	Counselor, Secondary and Professional Education	MWJ	Music Theory and Composition
ADM	Administration, Leadership for Women	ELB	Instrumental Music	MWP	Keyboard Music
AER	Aerospace Studies	ELO	Instrumental Music	MWS	Keyboard Music
ANT	Anthropology and Sociology	ENG	English	NSG	Nursing
ARH	Art	ESL	Geology and Astronomy	NSL	Nursing
ART	Art	ESS	Geology and Astronomy	ORG	Keyboard Music
ASA	American Studies	FIN	Economics	PAD	Government and Planning
ASH	History, American Studies	FLM	English	PEA	Physical Education
BEN	Instrumental Music	FRE	Foreign Languages	PEC	Instrumental Music
BIL	Biology	GEO	Geography and Planning	PEI	Physical Education
BIO	Biology	GER	Foreign Languages	PEL	Physical Education
BLA	Business Administration	GRE	Foreign Languages	PEN	Instrumental Music
BRC	Instrumental Music	HAR	Keyboard Music	PHE	Geology and Astronomy
BUS	Economics	HEA	Health	PHI	Philosophy
CBA	Instrumental Music	HEB	Foreign Languages	PHL	Physics
CHE	Chemistry	HIS	History	PHR	Physics
CHO	Vocal/Choral Music	HON	Honors Program	PHS	Physics
CLS	Comparative Literature Studies, English	HPE	Physical Education	PHY	Physics and Pre-Engineering
COR	Instrumental Music	HTR	Health	PIA	Keyboard Music
CRJ	Criminal Justice	HUM	Women's Studies	POR	Foreign Languages
CRL	Chemistry	ICO	Instrumental Music	PSC	Government and Planning
CSC	Mathematical Sciences	IND	Geology and Astronomy	PSY	Psychology
DRC	Instrumental Music	INS	Instrumental Music	PWP	English
ECE	Childhood Studies and Reading	ITA	Foreign Languages	RES	Counselor, Secondary and Professional Education
ECO	Economics	JEN	Instrumental Music	RUS	Foreign Languages
EDA	Special Education	JRN	English	SBA	Instrumental Music
EDC	Counselor, Secondary and Professional Education	KEN	Keyboard Music	SCB	Biology
EDE	Childhood Studies and Reading	LAN	Foreign Languages	SCC	Chemistry
EDF	Counselor, Secondary and Professional Education	LAT	Foreign Languages	SCE	Geology and Astronomy
EDG	Childhood Studies and Reading	LEN	English	SEN	Instrumental Music
EDH	Counselor, Secondary and Professional Education	LIN	Foreign Languages	SOC	Anthropology and Sociology
EDM	Instructional Media	LIT	English	SPA	Foreign Languages
EDO	Counselor, Secondary and Professional Education	LPN	Philosophy	SPC	Speech Communication and Theatre
EDP	Counselor, Secondary and Professional Education	MAB	Instrumental Music	SPP	Communicative Disorders
EDR	Childhood Studies and Reading	MAC	Keyboard Music	SSC	Social Studies, Ethnic Studies, Peace and Conflict Studies
EDS	Counselor, Secondary and Professional Education	MAK	Keyboard Music	STA	Mathematical Sciences
EDU	Counselor, Secondary and Professional Education	MAP	Instrumental Music	STC	Instrumental Music
		MAS	Instrumental Music	SWO	Social Work
		MAT	Mathematical Sciences	SYO	Instrumental Music
		MAW	Instrumental Music	THA	Speech Communication and Theatre
		MGT	Business Administration	VOC	Vocal/Choral Music
		MHL	Music History	VOI	Vocal/Choral Music
		MIS	Management Information Systems	WEN	Instrumental Music
		MKT	Business Administration	WTN	Instrumental Music
		MSI	Military Science	WOS	Women's Studies
		MTC	Music Theory and Composition	WWC	Instrumental Music
		MTE	Mathematical Sciences		
		MTL	Mathematical Sciences		
		MUE	Music Education		

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- KEVIN C. DUNLEAVY (1979) *Assistant Professor  
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- GEORGE FASIC (1988) *Assistant Professor of  
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- JOHN J. FENTON (1980) *Professor of Chemistry*  
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B.S., Queens College; Ph.D., University of  
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JACK GARDNER HAWTHORNE, *Art*

PHILIP P. HOGGARD, *Education*

CHARLOTTE E. KING, *Childhood Studies and*  
*Reading*

MARY L. KLINE, *Nursing*

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*Planning*

MURIEL LEACH, *Health and Physical Education*

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N. RUTH REED, *Health*

RUSSELL K. RICKERT, *Physics*

WALTER NATHANIEL RIDLEY, *Education*

B. PAUL ROSS, *Education*

JANE E. SHEPPARD, *Vocal and Choral Music*

W. CLYDE SKILLEN, *Biology*

RUTH STANLEY, *Mathematical Sciences*

R. GODFREY STUDENMUND, *Education*

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*Physical Education*

ELINOR Z. TAYLOR, *Physical Education*

JOSEPH M. THORSON, *Business Administration*

EDWARD T. TWARDOWSKI, *Health and*  
*Physical Education*

S. ELIZABETH TYSON, *English*

EARLE C. WATERS, *Health and Physical*  
*Education*

SOL WEISS, *Mathematical Sciences*

THEODORA L. WEST, *English*

ARDIS WILLIAMS, *Chemistry*

JAMES J. WRIGHT, *Music Theory and*  
*Composition*

EDWIN L. YOUNG, *Health and Physical*  
*Education*

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CHARLES C. SOUFAS, JR.

1986

RICHARD W. FIELDS

1987

MARSHALL J. BECKER  
WACLAW SZYMANSKI

1989

CHRISTOPHER BUCKLEY  
LARRY A. NELSON

1990

PAUL STOLLER

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1982-1983

FRANK A. SMITH  
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## Merit Awards

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MARY A. KEETZ  
JANE E. SHEPPARD  
CHARLES H. STUART

### 1983-1984

ELIZABETH A. GIANGIULIO  
KOSTAS MYRSIADES  
LOIS WILLIAMS

### 1984-1985

FRANK E. MILLIMAN  
RUTH I. WEIDNER

### 1986-1987

G. WINFIELD FAIRCHILD  
KOSTAS MYRSIADES

### 1987-1988

WALLACE J. KAHN

STERLING E. MURRAY  
ARLENE C. RENGERT

### 1988-1989

PAMELA HEMPHILL

### 1989-1990

MADELYN GUTWIRTH  
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## Distinguished Faculty Awards

### 1974-1975

THOMAS A. EGAN, *Teaching*  
E. RILEY HOLMAN, *Teaching*  
MICHAEL A. PEICH, *Teaching*

### 1975-1976

WALTER E. BUECHELE, JR., *Service*  
CARMELA L. CINQUINA, *Service*  
PHILLIP B. DONLEY, *Service*  
GEORGE W. MAXIM, *Teaching*  
EDWARD N. NORRIS, *Service*  
PHILIP D. SMITH, JR., *Teaching*  
WILLIAM TOROP, *Teaching*

### 1976-1977

ROBERT E. BYTNAR, *Service*  
ANDREW E. DINNIMAN, *Service*  
IRENE G. SHUR, *Teaching*  
RUSSELL L. STURZEBECKER, *Service*

### 1977-1978

MARC L. DURAND and ROBERT F. FOERY  
(Joint Project), *Service*  
BERNARD S. OLDSEY, *Service*  
GEORGE F. REED, *Teaching*  
RICHARD I. WOODRUFF, *Teaching*

### 1978-1979

ROBERT E. CARLSON, *Service*

JOHN J. TURNER, JR., *Teaching*  
C. RALPH VERNON, *Teaching*  
ROBERT H. WEISS, *Service*

### 1979-1980

CAROLYN B. KEEFE, *Teaching*  
JOHN A. MANGRAVITE, *Teaching*  
PHILIP D. SMITH, JR., *Service*  
NORBERT C. SOLDON, *Service*

### 1980-1981

LOUIS A. CASCIATO, *Teaching*  
PHILIP B. RUDNICK, *Service*  
FRANK A. SMITH, JR., *Teaching*  
JANE B. SWAN, *Teaching*  
JOSEPH M. THORSON, *Service*

# ACADEMIC CALENDAR 1991-1992

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## FALL SEMESTER 1991

September 2	Labor Day—dormitories open
September 3	Faculty Meetings—per departmental announcements
September 4	Classes begin—8 a.m.
September 9	Rosh Hashanah*
September 18	Yom Kippur*
November 27	Thanksgiving Recess begins—8 a.m.
December 2	Thanksgiving Recess ends—8 a.m.
December 14-20	Examination Period
December 14	Commencement
December 20	Fall Semester ends

## SPRING SEMESTER 1992

January 20	Martin Luther King Day—(no classes) Late Registration
January 21	Classes begin—8 a.m.
March 13	Spring Break begins—5 p.m.
March 23	Spring Break ends—8 a.m.
May 8	Reading Day—no classes
May 9-15	Examination Period
May 16	Commencement
May 16	Spring Semester ends

## SUMMER SESSIONS 1992

June 1—June 19	Pre Session
June 22—July 31	Regular Session
August 3—August 21	Post Session

\*Although the University will be in session, no examinations are to be administered on these major Jewish Holy Days.

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# Campus Map







